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AMERICAN ARTISAN and Hardware Record

VOL. 76. No. 22. 620 SOUTH MICHIGAN AVENUE, CHICAGO, NOVEMBER 30, 1918. $2.00 Per Year.

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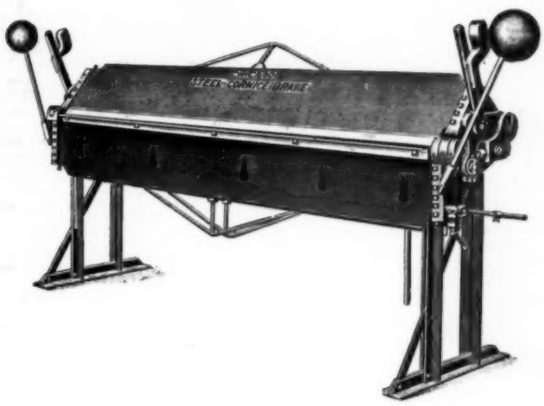

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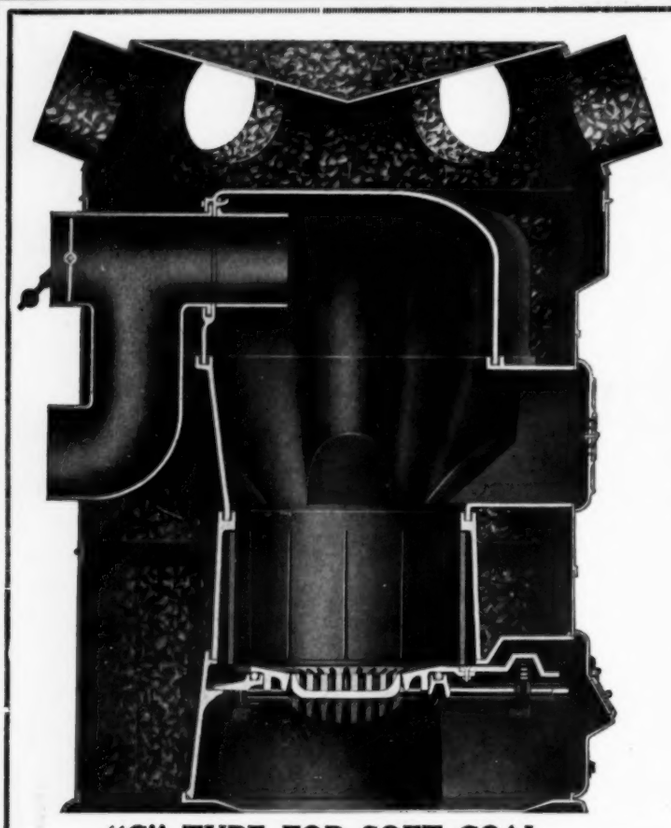

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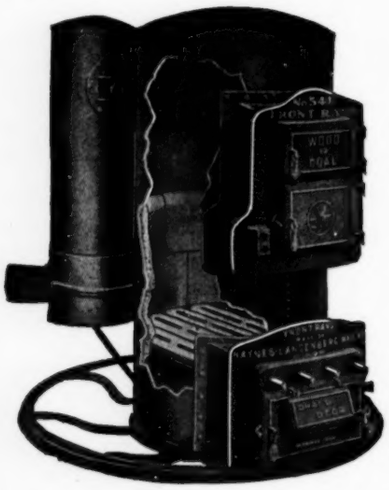

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Representative of
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PUBLISHED EVERY SATURDAY

AMERICAN ARTISAN and Hardware Record

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Gainful Holiday Present.

THREADBARE AS THE saying has grown, there is no royal road to knowledge. We may be born with certain aptitudes, but none of us comes into the world endowed with education and training. These must be acquired by personal effort. There was a time when the obtainment of knowledge was a slow and arduous task. That was in the days when schools were few and far apart and books and periodicals were beyond the reach of the common people. Many sacrifices were required to secure instruction the equivalent of that of the eight grade in the public schools of today.

Happily, conditions have changed to a marvelous degree. The sources of knowledge have multiplied on every hand. Books and periodicals are numerous almost beyond calculation. Whereas formerly it was difficult to get hold of them, it is now an embarrassment which to choose from the immense assortment. Although personal effort is still essential to the acquisition of knowledge, its tasks are no longer as arduous as in pioneer times. The agencies for the diffusion of knowledge are so specialized that it is a comparatively easy matter to get in summarized form the best and most needful knowledge in any department of human endeavor.

Just as surely as steam and electricity give us an immeasurable advantage over the Esquimaux or the Dyak savages, so accurate knowledge of one's calling equips a hardware clerk or a sheet metal worker with elements of superiority over those who neglect means for self-improvement. The success of any business depends upon the practical enlightenment of its personnel. The employe who uses his brains, who studies the industry in which he is engaged, and who constantly seeks for greater proficiency through the experience of others, benefits himself as well as his employer. Such a worker is certain of advancement.

Employers who recognize the value of training, can make no more gainful a Christmas present to their salesmen and mechanics than a year's subscription to AMERICAN ARTISAN AND HARDWARE RECORD. It is only a false modesty which would hinder the statement that this publication is an invaluable aid to the ambitious employe. The cream of the experience of successful men in the hardware, sheet metal, and warm air heating trades is placed at his disposal week after week. New methods of salesmanship, improvements in machinery and workshop practice, technical data, and pertinent, up-to-the-minute details concerning all phases of merchandising, are presented to its readers in attractive form. The gift of a year's subscription to such a trade journal is a wise and gainful holiday present—gainful alike to giver and recipient.

Outlook Is Optimistic.

REASONS FOR OPTIMISM with regard to our industrial and financial outlook are given by John Skelton Williams, Comptroller of the Currency and Director of the Division of Finance and Purchases of the United States Railroad Administration. The utmost publicity should be given to his statements for the reason that the mental attitude of a country's merchants determines its prosperity more than any other factor. There is ample evidence to prove this assertion. Practically every panic in modern times has been caused by psychologic rather than economic influences. It is well, therefore, to spread the facts and probabilities which help develop "the will to prosperity."

"Four years ago, in September, 1914," says Mr. Williams, "at the beginning of the war, speaking with my knowledge of the resources and strength of our country and of the men in charge of them, I told a bankers' convention at Indianapolis that at the end of the war the United States would be 'the gathering place for the renewal and distribution of hope and purpose, for the restoration and purification of a civilization drowned in blood and wrecked and dismantled by furious and reckless passion,' and I expressed my conviction that 'with the power gathered of peace, the resources derived of honest industry, and the will born of our own self-searching we will lead the world, and will be its dominating influence,' and that this wonderful power and influence would be used by us to bless and brighten, to lift, and comfort all humanity.

"That was no gift of prophecy. It was simply the application of business common sense to known facts. Now, looking forward, there is no excuse for fear or pessimism and no reason for wild extravagance or frantic optimism. We have money, enormous resources, men, and brains. We will need all for the task before us—the most enormous tasks that ever tested a nation.

"As we mobilized our young manhood for fighting, we have to mobilize all the wisdom, virility, conservatism, courage, and wealth we can command to adjust ourselves to the new responsibilities and duties put upon us, to coöperate with our associated democracies and allies in giving peace, freedom, and happiness to the world. We have a vast load to carry. We have vast strength with which to carry it."

A bare recital of the resources of our country which warrant Mr. Williams' optimism would fill volumes. Besides, we have learned many valuable lessons in the use of these resources. As a producing nation we are more efficient than we were in 1914. Our financial system is more firmly fortified against disaster. Thus, as Mr. Williams points out, during this calendar year of 1918, in which the strain upon our banking resources has been greater than at any time during our past history, there has been only one national bank suspension in our entire country. There has been no such record as this for nearly 40 years past. This immunity from failure is the more gratifying when we consider the extraordinary stress of these difficult times through which we have been passing with the whole world aflame. It is, therefore, a wise and patriotic thing for every merchant to think and talk optimism, to the end that all may be encouraged to maintain prosperity through the coming years.

Corrects An Error.

A COMMON ERROR is that which supposes that this country is in any danger from over-production. America has suffered occasionally from under-consumption, but never—in the real sense—from over-production or a surplus of labor. To go back no farther than the panic of 1907, which all Americans who have attained manhood can remember, the sudden cessation of industrial activities was caused by the inability of manufacturers to finance their operations, and, in some cases, to get their own money from the banks to pay wages. This is what caused the distress. They had plenty of orders and were in a position to give steady employment to their workmen, but the bankers' panic stopped the wheels of industry.

This is not likely to occur again because our banking system has been improved, and speculators and panic-stricken capitalists can not again hoard cash to an extent that will deprive the country of an ample supply of currency. After the outbreak of the war in Europe in August, 1914, America would have experienced the worst of all panics had the Federal Treasury not come to the rescue by issuing about $335,000,000 of emergency currency under the terms of the Aldrich-Vreeland Act, which was soon followed by the opening of the Federal Reserve Banks and the complete reform of our banking and currency system.

When peace is fully restored, the reconstruction of Europe will call for vast supplies of manufactures and raw materials. The reorganization of trade and industry on a peace basis will be a gigantic task the success of which will depend on efficient organization. We must prepare to provide work for every returned soldier and every other man in the country. We can not produce too much when the time comes. The danger lies in not producing enough real wealth in the form of foodstuffs, merchandise and building materials. Unemployed men are a burden to the country, but a man ceases to be a burden as soon as he is gainfully employed. Business is prosperous and the people live in comfort when everybody works, and the demand for labor is always good in such circumstances.

When production is at the top notch we never hear of over-production. It is always the other way, and merchants complain that they cannot get enough goods to satisfy their customers. If we can organize our industries and our agriculture so that every returned soldier can find work as soon as he lands the demand for our products will more than keep pace with the supply. Proposals to till the soil in a cooperative way on a vast scale are worthy of serious consideration because soldiers will come home trained to act in concert, and this training should be adapted to the arts of peace under intelligent direction. It will be a crime to have willing men unemployed when there is so much construction work to be done.

Obligation of Citizen.

RETAILERS ARE JUST as vitally interested in the great problems of commercial reorganization as manufacturers. Consequently, they should have an equal voice in the plans for reorganizing the industries of the country on a peace basis. The trouble with our nation in the past has been the tendency toward the centralization of public opinion and action in the hands of a comparatively small group of men. The time has come for the great mass of the people to exercise their rights of sovereignty in every matter which affects the general welfare. The subject of readjustment is, therefore, an important topic for discussion in the various retailers' associations. It is through such organizations that dealers can give expression to their opinions and, in a large measure, exert a legitimate influence upon the financial and industrial policies of the day.

A study of the economics of reconstruction is the duty of every citizen who recognizes his obligations to the republic. But the average citizen is unable to pursue such a study as an individual. He needs the help which comes from an interchange of ideas. His personal interests need to be coordinated with like personal interests of his fellow citizens in order to arrive at a proper conception of that which is common to all and, therefore, of general significance in the promotion of the public weal. This he can best accomplish by joining the organization of his trade. The various retail state hardware associations have already made arrangements to deal with the economics of reconstruction in their forthcoming conventions.

Gives Good Suggestion.

A SAYING current in many literatures, sacred and profane, is that faith without works is of little avail. This applies with as much force to business as to righteousness. The retailer who handles commodities in which he has no confidence is at a serious disadvantage. He can not put enthusiasm into his selling of such goods. Often the note of sincerity is lacking for the plain reason that he is unable to impress upon his customer what he himself does not believe. Wherefore, it is the first principle of good merchandising to carry only articles of reliable standards of excellence. Then, having faith in such dependable goods, the next principle is to sell them at a price which covers overhead expenses plus a decent profit. In this connection, attention is directed to a card sent out to its patrons by F. Meyer and Brother Company of Peoria, Illinois, which reads as follows: "Getting your price for your

product is a mighty good way to demonstrate your faith in it."

RANDOM. NOTES AND SKETCHES.

By Sidney Arnold.

A tiny seed planted in the ground and bearing many times its own weight of earth on top of it will force its way upward to light and life. So, too, every germ of happiness and joyous fancy which we place deep down in the heart of us is sure to become fruitful in larger growths of gladness.

* * *

F. D. Mitchell, Secretary of the American Hardware Manufacturers' Association, with offices in New York City, says that there are times when a woman is justified in changing her mind. He gives this instance:

Jimmy was crying in the hall as his mother came along, dressed for a journey. She asked why he was crying.

"You are going away, an' so is papa!" he tearfully explained.

"Why, son, I shall be away only two or three days, but father is not going away."

"Yes, he is," Jimmy declared. "He's going to Rome."

"Rome? What do you mean, dear?" inquired his mother in surprise.

"He said today to Mr. Smith that he would make Rome howl when you left."

"Indeed! Well, dear, I shan't leave you now."

* * *

An acquaintance with at least the outlines of literature saves one from embarrassment on occasion, according to my friend F. C. West of the Richards-Wilcox Manufacturing Company, Aurora, Illinois. As a case in point, he narrates the following:

A charming city girl went to the country to spend a part of the summer season with a favorite aunt. One afternoon the aunt went to call on some friends, leaving the city niece alone with the maids in the big farmhouse.

"I hope you haven't been lonely, dear," solicitously remarked aunty on her return in the evening. "What have you been doing all the afternoon?"

"I haven't been lonely a bit, aunty, dear," answered the niece. "I spent the entire afternoon in the hammock with my beloved Robert Browning."

"What's that?" exclaimed the scandalized aunt in a cold, hard voice. "Really, Gladys, I can't permit such doings. If it occurs again I shall certainly write to your mother."

* * *

I like the way that James Doherty, Chicago manager and Vice-president of the Utica Heater Company, Utica, New York, tells a humorous story. The merry twinkle in his eye gives a zest to the story which, unfortunately, cannot be transferred to the printed page. With the aid of that twinkle I got a hearty laugh out of this tale:

The Smiths had an old hen which insisted upon neglecting her comfortable nest to lay a daily egg in the coal cellar. "I can't think," fretted Mrs. Smith, as she and her small son John together hunted for that particular egg "why this one hen insists upon using the coal cellar." "Why, that's easy, mother," exclaimed John in astonishment, "I suppose she's seen the sign 'Now is the time to lay in your coal.'"

* * *

My friend C. H. Bicalky of the Bicalky Fan Company, Buffalo, New York, tells a Lincoln story which takes on sharper meaning in view of the defeat of the Huns:

Lincoln, during the civil war, gave a bumptious young German a commission as captain. As the interview was about ended Herr von A. said: "And you must remember, Mr. President, my name is one of the oldest and most aristocratic in Germany."

Old Abe looked at him a moment and then said: "Well, if you are careful, it won't hurt you any."

* * *

Speaking of the difficulty of excluding unwelcome visitors from busy executives, my friend C. G. Schroeter of Schroeter Brothers Hardware Company, St. Louis, Missouri, relates this example:

"I can't keep the visitors from coming up," said the office boy, dejectedly, to the president. "When I say you're out they simply say they must see you."

"Well," said the president, "just tell them 'that's what they all say.'"

That afternoon there called at the office a young lady. The boy assured her it was impossible to see the president.

"But I am his wife," said the lady.

"Oh, that's what they all say," said the boy.

* * *

Rhetoricians and poets to the contrary notwithstanding, there is much in a name. My friend W. J. Burton of W. J. Burton Company, Detroit, Michigan, recounts this peculiar illustration of the fact:

A man named Dodgin had been appointed foreman in a brickyard, but his name was not known to all the employes. One day while on his round he came across two men sitting in a corner smoking, and stopped near them. "Who are you?" asked one of them. "I'm Dodgin, the new foreman," he replied. "So are we," replied the other workers. "Sit down and have a smoke."

* * *

Few men are better fitted to voice the spirit of American sportsmanship than Grantland Rice—not only because writing about sports is his specialty but because he understands the courage which knows how to turn defeat into moral victory. Here are some verses which he has composed, expressing that idea:

The Brave Life.

Brave Life, I hold, is something more than driving upward to the peak;
Than smashing madly through the strong and crashing onward through the weak;
I hold the man who makes his fight against the raw game's crushing odds
Is braver than his brothers are who hold the favor of the gods.

On by the sky line, faint and vague, in that Far Country all must know,
No laurel crowns of fame may wait beyond the sunset's fading glow;
But life has given me the chance to train and serve within the fold,
To meet the test—and be prepared for all the endless years may hold.

UP TO THE MINUTE NEWS SIFTINGS

FOOD ADMINISTRATION DESIGNATES WEEK OF DECEMBER 1 TO 7 AS CONSERVATION WEEK.

To bring before the American people in a forcible manner the need for saving food and sharing it with the Allies and liberated nations, the Food Administration has named December 1 to 7 as Conservation Week. Conservation is vital to the relief of stricken Europe. Our harvest season has come and gone, and whatever food is exported must come from our surplus and from our savings, very largely the latter. Certain foods, such as meats, fats, and dairy products, it is true, are produced throughout the year, but even these depend largely on feeds and fodder, supplies of which are limited and can not be replenished until another harvest.

The original pledge made by the Food Administration in behalf of the people of the United States was 17,500,000 tons of food to be shipped overseas by July 1, 1919. This amount of food is 50 per cent greater than last year. With Belgium and France liberated and millions in south central Europe clamoring for food, the United States is now undertaking to increase its exports from 17,500,000 to 20,000,000 tons. The Mediterranean Sea routes are now sufficiently safe for bringing wheat from India and Australia, hence our exports will consist largely of fats, meats, and feed. Feed is essential for milk production, of which the stricken nations are in critical need.

Conservation week as planned will include a message from Mr. Hoover to the people through churches, fraternal bodies, clubs, schools, posters, window displays, and the press. An effort will be made to warn of the serious results abroad if we fail to heed the requests for continued conservation. Food, we are reminded, is the only effective weapon with which to combat famine still threatening hungry millions. And never has there been so great an opportunity for women and children as well as men to show their true spirit of democracy in sending relief by daily acts of food saving.

Conservation week is intended also to impress upon every one that stopping hostilities or even the ultimate signing of peace terms produces no extra food and that human lives will continue to be sacrificed unless food is saved in this country and properly distributed among those who have pitifully little or none.

COPE PATTERN WORKS CHANGES NAME.

By unanimous vote of its stockholders, the Cope Pattern Works, Detroit, Michigan, which was founded in 1891, has changed its corporate name to Cope-Swift Company, Incorporated. The alteration of title became effective November 18, 1918. The personnel, location, and present business of the company will not be affected by the change, nor does it cause any modification of the relation of the corporation to the stove and warm air heater trade. The same painstaking policy of careful service and trustworthy material will be maintained which has gained so sound a reputation for the Cope Pattern Works. It is hoped that the new name will quickly become familiar to the old customers and win as gratifying patronage among prospective buyers as the former title of the company.

SAYS PRICES WILL REMAIN AT THE PRESENT LEVELS FOR A YEAR.

Dealers in stoves who are refraining from replenishing their stock under the impression that prices will soon go down, are incurring the risk of running short of supplies to meet current demand and thereby losing customers. In this connection the following article by Harvey J. Fueller of the Detroit Vapor Stove Company is reproduced from the November, 1918, issue of *The Stove Salesmen's Review*, official organ of the Stove Salesmen's Association of Pennsylvania:

We are advised from some quarters that peace is causing a few dealers to feel that it is unwise to place orders at the present time. There is a feeling evidently upon their part that peace would materially lower prices on all manufactured products. A careful survey of present day conditions will easily convince such chaps that they are all wrong. We, as manufacturers, are paying more money for raw materials today than ever before—in fact we are paying so much more that it would be only good business for us to raise prices instead of leaving them the same as last year. The manufacturer in any line must buy his material months in advance of actual needs in order to be protected on delivery. The price on steel and castings will undoubtedly remain as at present if not higher for at least a full year after peace is declared. Labor will not be affected to any extent for at least a year after the end of the war. With Government control of both prices and distribution of raw materials it is not possible to see how prices can be lowered at all for at least a year after the Kaiser has hollered "enough." The reconstruction period that must follow this war will demand a supply of raw materials of all kinds that will tax the capacity of the producers for some time to come. *Prices will not be lowered for at least one year after the war* but we as manufacturers *know that they may be advanced.* The dealer who is showing good judgment is the chap who is *buying today* in order to be sure he can *deliver* tomorrow.

When you hear a man complaining of having a family to support, the chances are that he lives on the fruits of his wife's labor at the washtub.

DISCUSSES WAGE PROBLEMS OF OUR NEW MERCHANT MARINE.

In an interesting article entitled "American Ships on the Pacific," published in the November issue of "Asia," Chairman Edward N. Hurley of the United States Shipping Board gives his views on the La Follette Act, and other matters connected with our new merchant marine.

Thousands of business men, especially those engaged in shipping, have shown anxiety about laws relating to our new merchant ships and have asked questions concerning policies on wages, ownership, operation, costs, competition and the like. Many of them believe that new legislation will be needed to keep our ships on the ocean.

Mr. Hurley reminds the public that the Shipping Board was created some months before our entry into the war. Its chief function is to build up an American merchant marine and Congress gave it full scope for investigation and the recommending of further legislation. Therefore, the chief task today is to secure real information about the operation of ships, and create an intelligent American opinion on ships, so that if new legislation is needed it may be wise.

"One of the chief obstacles supposed to hamper us in the operation of our new ships," says Mr. Hurley, "is the La Follette law, also known as the Seamen's Act. I think it well to give my viewpoint on this much debated law.

"It is unfortunate that sea-wages have occupied so much of our thought in connection with merchant ships. The La Follette Act is a high-wage law and has, therefore, been a burning question. It seems inevitable that all discussions of American shipping must begin with a debate about a coolie and a bowl of rice, and in many cases never get any further. Read shipping testimony before Congress and this problem of wages dominates. Talk with shipping men and you will find it is ever-present in their thoughts.

"Now it may be that they are right—that in the future, after we have made practical efforts to operate American ships with American crews, paid American wages and living under American standards, we shall need cheaper labor to hold our own in competition.

"But if that proves true, then American merchant marine will run counter to most of our industrial experiences. We haul freight on the railroads and the Great Lakes cheaper than any nation in the world, and do it with American labor under American conditions. Most of our foreign trade in manufactured goods consists of products made by the best-paid American workmen—automobiles, typewriters and office machinery, agricultural implements, steel and other metal products. We have learned at home, as business men, that it almost invariably pays to raise living standards and wages, and I believe that this is as true upon the oceans as it is upon land.

"Wages are by no means the only factor in management. If you have an up-to-date plant and run it at high efficiency with a scientific cost system and can create a large, steady volume of business through intelligent sales work and good service to your customers, wages may be an entirely secondary matter—indeed, by utilizing these other elements of good management, you may be able to increase wages. That is true in manufacturing, and I believe it to be true of merchant shipping. Perhaps I am wrong.

"It is natural for me to be guided by past experience as a manufacturer in approaching a new task, and so my thought on merchant marine policy has run in these directions rather than to cheap labor. There is so much opportunity for efficiency in the design and operation of our ships, the rearrangement of our ports, the building up of trade volume, the use of machinery in handling freight, and the saving of money by quick turn-around of ships, that we have studied these matters first. It was logical to turn to them during the period when we were building our ocean transportation plant, with its terminal facilities. Had we been apprehensive over the coolie and his bowl of rice we might have overlooked opportunities to incorporate economically new devices in the design of our ships and port machinery. So my policy thus far might be stated as follows:

"First—Build the ships and win the war.

Second—Make our merchant marine as good an American machine as possible and truly American in operation and living standards.

"Third—Put the support of an intelligent American public behind our merchant marine.

"Fourth—Then if we can not keep these ships on the ocean without the coolie and his bowl of rice, it will be time to go to Congress and ask for help.

"The La Follette act has not yet been tested, by reason of abnormal conditions in ocean transportation caused by the war. Most arguments advanced against it, as well as for it, are now theoretical, and we need the light of practical experience to guide us in changes if they are necessary. I am even a little prejudiced in favor of that law because it raises human standards in the ocean transportation industry. I personally believe that good human standards are not only desirable, but also that they actually work better than poor human standards."

COMBINES PATRIOTISM WITH BENEFIT.

Liberty Loan subscribers who are paring down their expenses to pay installments on their pledges ought to realize that they are performing an important work for their own permanent benefit as well as a patriotic duty. The prosperity that everybody in America hopes for when peace is finally established will be made much more certain and general because of the universal distribution of Liberty Bonds in the hands of the people. It is possible that the government borrowings will call for annual interest payments of $800,000,000 to $1,000,000,000 a year. All this money will be paid to buyers of Liberty Bonds. It will come in like "finding money," every six months, to gladden those who have bought the war loans. In fact, shrewd financiers in the big cities, forsee that the training in economy now being taken by millions of small subscribers to the Liberty Loans, will have a definite and lasting effect on the success of their lives.

OTHER LOANS ARE TO BE FLOATED.

Other Liberty loans will be called for by the Government before the bugles sound the recall of our boys from France and Flanders. No matter how long the Peace Conference may go on, there must be billions more money raised. Our vast overseas force and its equipage must be brought home. The Government will have to borrow much more money. Let us all be glad that the training and drill of the great Fourth Loan campaign have taught the American people how to sacrifice for an eternal cause. The Loans that may come will be subscribed the easier for what we have learned in putting over the Fourth.

EXPLAINS THE PURPOSE AND USE OF TAX ANTICIPATION CERTIFICATE.

Aside from maintaining public order and the defense of life and property the most vital function of government is the provision of money, or an acceptable medium of payment and exchange. The financial needs of the Government, in war and after that for the restoration of the peace footing, are very large. Heavy taxation is necessary and the problem of meeting the Federal taxes without affecting the equilibrium of money and credits vital to the welfare of the nation. To meet the condition of raising six billion dollars of taxes in 1919 the Government has decided on two policies: (1) Installment payment of the taxes on incomes and profits—the first installment falling due March 15; (2) The issuance of Tax Anticipation Certificates bearing 4½ per cent interest and maturing at the time the taxes must be paid.

In effect the Tax Anticipation plan enables all who are liable for taxes to the Treasury to rally their cash means in the interval between Nov. 7, 1918, and March 15, 1919, and to invest that cash in a perfectly safe Government security, at a fair rate of interest, and in a form which will be accepted by the Treasury in tax payments March 15, 1919. Under this plan it will be possible to avoid any disturbance of the money market and credit conditions at the incidence of the enormous tax payments next spring.

The matter is thus summed up by R. G. Elliott, Chairman War Tax Advisory Committee National Association of Credit Men:

"We have been buying Treasury certificates in anticipation of taxes ever since it became apparent that the amount of revenue produced by the 1917 Act would be very large. War taxes are in the nature of a division of profits, with the Government in the position of a preferred stockholder who must be paid before there can be a distribution of profits to the owners. Therefore, provision should be made to cover this tax liability, the money withdrawn monthly or quarterly and invested in liquid form during the year in which the profit is earned.

"The Credit Men's Association since the passage of the Excess Profits Tax Law has advocated the serial payment plan and the creation of reserves by taxpayers —in other words, anticipating the payment by investment in certificates of indebtedness which will relieve the demand for credit at taxpaying periods.

"These Treasury certificates furnish a convenient form of income-producing reserve and by investing in them during the taxable year to the extent of the tax liability, makes each year stand on its own bottom and will tend to defer the issue of bonds and permit an earlier reduction of war taxes for governmental expenditure, bringing us closer to home in our financing by reducing expansion, thus creating a sounder and more stable credit condition."

SAVINGS MUST BE CONTINUED.

Warning that the end of hostilities abroad does not mean the end of activities here has been issued by the War Savings Committee for Illinois of which Martin A. Ryerson is director. The committee's statement says:

"During the first year of the War Savings movement, now drawing to a close, we saved to destroy; now we must save to rebuild. In our savings we aimed at the destruction of autocracy, and it fell. But in the crushing of autocratic rule and of militarism, cities were laid low, stately forests razed, entire states devastated and once productive fields turned into a succession of shell craters. Much of this destruction was unavoidable. On the enemy's side the greater part of it was wanton—churches were bombarded deliberately, works of art destroyed, hospitals blown up and undefended cities and towns shelled.

"Now we must save to help rebuild ravished Belgium and feed the enslaved Belgians. We must save to make habitable the cities of France laid waste by the tremendous military engine of destruction of which the ex-kaiser was the embodiment. We must save that food may be provided for the starving French women and children who endured untold privations that the men of France might combat the invader. We must save to restore the depopulated and outraged Serbia. We must save to alleviate misery such as the world has never seen before. We must save to aid in repairing broken spirits and broken bodies. We must save to help set up governments in the fallen empires that will make it impossible to plot the assassination of the defenseless and the subjugation of the weak with the savagery that marked the operations of the Germans.

"We must help to make complete the overthrow of the system that makes it possible for a few moral degenerates, who, by the accident of birth are vested with authority, to sacrifice the earnings of a generation and drench the earth in blood. Finally, we must save to provide for our boys while they are on garrison duty abroad and during the period of demobilization, which probably will take from one to two years. With the war won we must sit tighter than ever on the War Savings program. If Europe is to be saved from starvation and if the reconstruction program is to be carried out we must lend the government the money which in turn will be loaned to the needy European nations. And in doing this we are not giving anything; we are helping ourselves by saving for the future."

If you are tied up in your business, you are "bound" to succeed.

THE WEEK'S HARDWARE RECORD

Of Interest to Manufacturer, Jobber and Retailer

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 40 to 45 inclusive.

NOMINATES OFFICERS FOR NEXT YEAR.

A goodly number of the members of the Pittsburgh Retail Hardware Dealers' Association were in attendance at the regular monthly meeting of the organization which was held Friday evening, November 22, 1918, at the Fort Pitt Hotel. Nominations for the various offices of the Association resulted in the selection of just enough men to fill the places. Hence, there remains only the formality of declaring the following members elected at the December meeting:

President: Louis J. Heckler.

Vice-presidents: A. R. Orr, Gustave Shultz, E. N. Trader, George Hegner.

Secretary: Charles W. Scarborough.

Treasurer: Samuel McKnight.

The progress being made by the officers of the Pennsylvania and Atlantic Seaboard Hardware Association in their work of promoting the annual convention and exhibition of that body in the second week of February, 1919, was reported to the meeting by Sharon E. Jones its secretary. Mr. Jones was very optimistic concerning the outlook, basing his predictions on the cessation of the war and the consequent keen desire on the part of business men to reconstruct business and place it on a more solid footing.

Charles W. Scarborough, the active and alert Secretary of the Pittsburgh Retail Hardware Association, declares in a letter to American Artisan and Hardware Record that the flow of prosperity in Pittsburgh is at high tide, the only drawback being a very serious shortage of unskilled labor. Hardware retailers have every reason to look forward to a big volume of trade and, therefore, more than ever need the counsel and suggestions which they receive by faithful attendance at the meetings of their organization.

DECIDES TO GO AHEAD WITH EXHIBIT.

Taking advantage of the ruling of the War Industries Board removing the ban on hardware exhibits, the North Dakota Retail Hardware Association has decided to go ahead with the exhibit in connection with its annual convention, February 12, 13 and 14, 1919, to be held in Fargo, North Dakota. In a letter to American Artisan and Hardware Record announcing this decision, C. N. Barnes, Secretary of the Association, writes:

"Our exhibit as well as convention sessions will be held in the Fargo Auditorium, a building most desirable for such gatherings, and from the correspondence that we have had with former exhibitors, I am led to believe that we are going to have an exhibit and convention as creditable as any we ever held, and I would not be surprised if it turns out to be the best in the history of our Association."

ARRANGES TO MAKE PROMPT SUMMARY OF THE LABOR SITUATION IN INDUSTRIAL CENTERS.

At the request of the Secretary of War and the chairman of the War Industries Board, the machinery of the United States Employment Service has been set in motion for the making of an immediate "sizing up" of the labor situation in industrial centers throughout the country, according to a statement issued by the Department of Labor.

The purpose of the information sought, which will be gathered by the community labor boards of the United States Employment Service, is to enable the War Department and the War Industries Board to avoid causing unemployment through too rapid curtailment of war contracts or too rapid demobilization of the Army. This will give to the Government a view of the immediate labor situation, so that by next week it will be known in what centers there is shortage or surplus of labor and whether demobilization in those centers can be rapid or slow.

Approximately 100 industrial centers and the same number of industries are being covered in this initial "size up." The community labor boards will get their information as regards local labor conditions by means of personal contact and telephonic communication with employers, plant managers, employment managers, labor organizations, commercial bodies, the local employment offices of the United States Employment Service, and other sources.

The employment service will continue to act as an intelligence medium for the War Department and War Industries Board and will make weekly reports on local labor conditions to the War Industries Board and the Federal directors of the employment service for the States. A corps of expert organizers of the employment service has left Washington for various parts of the country for the purpose of instructing the community labor boards in this further work. All are men familiar with industrial processes and a number of them have been detailed to the service by the War Industries Board.

The composition of the community labor boards makes them peculiarly fitted for gathering the information desired. Each board consists of a chairman representing the employment service and a representative each of labor and management. On a number of the boards there also are two women members representing women workers and employers of women.

ALL RESTRICTIONS ARE REMOVED ON NONWAR BUILDING PROJECTS.

Of interest to dealers in builders' hardware is the following statement authorized by B. M. Baruch, chairman of the War Industries Board:

All remaining restrictions on nonwar construction throughout the United States were officially removed November 21, 1918.

Formal notice to this effect was telegraphed to the chairmen of all the State councils of defense by D. R. McLennan, chief of the nonwar construction section of the War Industries Board.

The action taken permits all building operations of whatever character, held up in the interest of the war program, to proceed. No further permits will be required from the War Industries Board or the State councils, through whom control over the situation in each State was maintained.

Immediately following the signing of the armistice on November 11 the nonwar construction section took steps to loosen the restraints on the industry, and in a formal order issued that day removed a great many of the barriers. Since then, and with a view to assisting the industry back to a complete peace basis as quickly as possible, a careful canvass has been made to determine whether the conditions obtaining in each State with respect to building materials, transportation, and the supply of fuel and labor would warrant a removal of the remaining restrictions. In this investigation the nonwar construction section sought the views of the industry itself and of the State councils of defense. The replies received, coming from practically all the States, showed a unanimous opinion in favor of such action.

WAR INDUSTRIES BOARD PREPARES TO HELP PEACE WORK.

By agreement with all the war-making agencies of the Government the War Industries Board is to be promptly advised of revisions and adjustments of all war contracts of the Government in excess of $100,000.

Under this arrangement the War Industries Board is to be the bridge whereby the industrial resources of the United States, which have been tied up in the war program of the Nation, are to be carried back to a peace basis and rapidly diverted to the normal needs of industry and trade.

While it has never been the function of the War Industries Board to make contracts, and while, therefore, the War Industries Board can not assume responsibility for any of the financial adjustments with contractors incidental to cancellations, the board will undertake by advice and recommendation so to control the situation as to stabilize the flow of materials, labor, and plant facilities back to peace channels.

To this end, the facilities section of the War Industries Board will act as the clearing house of all information relating to contract adjustment. It will receive information concerning contracts to be canceled from the various departments of the Government, and, through the various commodity sections of the board, keep in constant contact with the various industries. At all times will there be contact maintained with the Labor Department also, so that as labor is released from the war industries by contract cancellations immediate demand for its services can be located elsewhere. Bearing in mind the fact that for some time to come there must be continued those parts of the war program necessary to maintain the existing military establishment here and abroad, it will likewise be a function of the facilities section to divert, where possible, the materials, labor, and facilities released by one department to the requirements of another department.

CONDITIONALLY REVOKES ORDER FOR LIGHTLESS NIGHTS IN WINDOWS.

Retail hardware merchants who make use of lighted window displays at night will be interested in learning that the United States Fuel Administration has conditionally revoked the "lightless night" order. It is to remain in force only under conditions in which State fuel administrators decide that its continuance is necessary.

Every plan and request for coal conservation made during the war by the United States Fuel Administration has been so cordially received and so fully and thoughtfully carried out by the public that the policy of the administration henceforth will be, gradually to eliminate restrictive orders, and to carry on necessary voluntary conservation through educational means, it is announced.

In pursuance of this policy, orders have been issued setting aside the "lightless night" order except where State administrators, because of conditions local to their States, feel the necessity for its continuance and direct that it be kept in effect. Removal of other restrictions will follow, it was announced, in confidence that the public, already appreciating the necessity for conservation, will carry it forward without the ever-present reminder these orders supply.

Decreases in anthracite coal production were called to the attention of the public in connection with the call for voluntary conservation. This production, driven by loyal miners to unprecedented records during the war, was smitten by the influenza epidemic and fell off 25 per cent in six weeks, due to illness and to inevitable relaxation of effort when the armistice was declared. The cessation of hostilities, on the other hand, released virtually no domestic sizes of anthracite coal because almost the total output even in war times is used for heating, and the Nation's demands in this respect either remain undiminished or are increasing. Bituminous production also fell off under the influences which affected anthracite.

Demands of industry, the resumption of interrupted commerce, the expansion of the Nation's business, and her relations with other countries, all are cited as impending and sure necessities. The extent to which these demands will replace those of war can not now be estimated exactly.

"Lightless nights" were instituted last winter. They were withdrawn later and reinstituted July 24. The request for their observance was withdrawn from a number of States recently.

TURNS INQUIRIES INTO ORDERS.

Much illuminating advice concerning the sales possibilities contained in letters of inquiry is given by a writer in *Hardware and Metal.* He puts the pertinent question to his readers: Are you getting all the business out of the letters that come in from customers that you should? An investigation recently made into this matter by several firms proved conclusively that a percentage, and not a small percentage of business either, was being entirely overlooked. It was overlooked because the persons reading the letter in nine cases out of ten failed to realize the hidden possibilities that lay in many of the queries for information, prices, etc. When a farmer's wife for instance, wrote in asking for information about an electric toaster or the price of floor paint it was easy enough to give her the information and make the sale eventually. A little attention to the matter however, has convinced many firms that there are huge sales possibilities hidden in the majority of these letters. The ability to recognize hidden leads, to sense the possibilities for business development in some insufficiently expressed phrase, in short to "smell out" the business, is now being turned to profitable account.

The careful analysis of replies received by hardware firms who send out printed matter is a tremendously important matter. Proper reading and interpretation and prompt following up of all leads for business may mean a difference of many thousands of dollars annually in your turnover. Many people, especially farmers, who know well enough what they want, find great difficulty in making themselves clear when writing. In thousands of cases farmers, and city people too for that matter, become interested in some advertising matter or some printed matter sent out by hardwaremen and want to buy. In writing to ask about the goods, however, they very often fail to make it clear just what they have in mind to purchase. Women especially will ask for prices of half a dozen things. Very often these inquiries will reveal to the careful dealer the direction in which their thoughts are traveling and he will see big chances for interesting them in other goods. It is this ability to grasp opportunities and follow them up and convert them into successful sales that is making many hardware firms show a most satisfactory increase in their volumes of sales for the year.

The man who sells his customers what they ask for and nothing else is a typical example of the old time, easy going "store keeper." The man who sells his customers more than they came to the store to buy is a real merchant. Many firms throughout the Dominion long ago realized the "pulling" power of attractively prepared mail matter. They have developed many departments of their stores enormously by timely trade letters and circulars sent out to their customers. They have found that it was good business to send these out regularly to customers and to keep lists of prospects to which they keep adding new names. A careful going over of the letters received in reply however has convinced many proprietors that they had not fully recognized all possibilities for "hidden" business that lay behind some of the questions asked. They are giving this side of the question more careful consideration and are increasing their sales still more.

Your customers of course want to know what you have to sell. Very often they are particularly interested in knowing what the goods look like and always in knowing how much you want for them. These three points form the basis of some of the most successful selling literature that has been sent out. It has more than proved its efficiency over literature sent out by firms who used their space to eulogize themselves, their store or their prices. In nine cases out of ten stuff of this kind went over their heads and was wasted. The well planned letter or circular however, with its simple yet direct appeal, invariably brings inquiries that later bring good business. Very often by going over these letters carefully merchants find that apparently vague expressions when followed up bring extremely satisfactory returns.

A man wrote in recently to a hardware dealer and said "I think I will try some of your paint as mentioned in circular, send me a half gallon at price stated." The hardware man sent the paint, but he did more. He sent a man with it who could talk paint, size up the work and who was a salesman also. He went out ten miles in the country and got in personal touch with the man and found that there was a great deal of other work that needed doing besides what the farmer had in mind. He convinced him thoroughly that he could not afford to put that work off any longer as if he did he was going to have a much greater bill for repairs than the necessary paint would cost. He convinced him also that there was work in the house that should be done, implements that should be painted and other work done. He sold enough paints and brushes to pay for his time and expenses many times over, and he also got a line on other business in the neighborhood which he will follow up.

When your customers' letters are not "intensively" read and properly followed up, much of the time and expense merchants put on their letter or circular campaigns are wasted. There is also the waste of paper or postage and above all of opportunity. Letters and circulars properly handled are efficient and economical salesmen. They will draw business from all over a firm's territory, but unless the proprietor of the store or the party in charge reads them very carefully and thoroughly appreciates the possibilities that lie hidden in many of them a great deal of good opportunity for trade may be lost.

SELF-DENIAL FOSTERS THRIFTINESS.

Millions of American citizens have purchased and entered into a pledge to pay for Liberty Bonds on the installment plan from future earnings. The self-denial which they must practice to save will in time make them owners of a fully paid up bond. They will then have served their country in its time of need and added to their own means by a safe, income paying investment—in fact the strongest and safest investment in the world, and one which will gradually increase in value. Do not sell your Liberty Bonds; keep them, and avoid putting your money into uncertain investments.

ANNOUNCES DECISION OF JUDGES IN WINDOW DISPLAY COMPETITION.

The comparatively small number of contestants entered in this year's Window Display Competition of AMERICAN ARTISAN AND HARDWARE RECORD is to be attributed to two main causes. The first is the shortage of window trimmers due to draft and enlistments in war. The second is traceable to the influences of the war itself upon retail business. The uncertainty of prices, the wide range of fluctuation in the supplies of commodities, and the pre-occupations growing out of war itself have combined to turn the thoughts of merchants out of the common channel of business and have, to a considerable extent, disorganized their established methods of procedure. In such circumstances there has been lacking the stimulus to participation in competitions of any description. The wide difference between the number of window displays entered in this competition and that of former years is, therefore, not surprising. It may be stated, however, that the window exhibits entered in the contest make up in excellence of quality what they lack in numerical quantity. At the risk of incurring the imputation of vainglorious boasting, the declaration can be made that the lessons in the art of window display published from week to week in AMERICAN ARTISAN AND HARDWARE RECORD bear praiseworthy fruition in the four window displays which were awarded the prizes this year.

The judges chosen to pass upon the merits of the photographs and descriptions entered in the Competition were selected for their impartiality and business shrewdness. Tuesday, November 26th, Irving S. Kemp, H. B. Macrae and H. W. Beegle met to act as arbiters of the merits of the various exhibits entered in the Competition. Each of these judges is endowed with strong personality and vigorous self-reliance. Their knowledge of the different aspects of the hardware industry as well as their acquaintance with the processes of retail merchandising amply justified their choice as judges in the contest which has just closed.

Irving S. Kemp of the Vaughan and Bushnell Manufacturing Company, 2114-2130 Carroll Avenue, Chicago, Illinois, is sales manager of that Company. He is noted for the soundness of his judgment. His talent for driving straight forward to positive conclusions, without vacillation or temporizing, has proved an invaluable asset to the business organization with which he is associated. He has made a life-long study of the psychology of selling. His experience is a composite of practical activity, rather than of theorizing and texts. He is conversant with the processes of selling, both from the producing and the distributing angle. He combines in rare union the qualities of enthusiasm and judicial temperament. In selecting Mr. Kemp, therefore, we are giving the contestants the benefit of a judge who possesses ideal qualities for the work in hand.

H. B. Macrae is the Western manager of the Chicago office of the Reading Hardware Company. He is considered one of the foremost experts in all matters relating to builders' hardware. Being a successful man of business, he is quick to recognize the factors which are at work to produce success in the business of others. He has an unerring instinct for choosing methods and plans which bring gainful results. His character is an attractive one. He is genial, pleasant, and obliging. Coupled with these traits, are firmness of conduct and unswerving tenacity of purpose, in all matters requiring the exercise of such qualities in business. He has a keen sense of values in artistic publicity and he places much emphasis upon the effectiveness of appealing to the esthetic perceptions as well as to commercial necessity in the arrangement of window displays. He is thoroughly competent to pass upon the goodness of such displays from both points of view.

H. W. Beegle of the Burgess Battery Company possesses highly developed powers of discrimination. He is courteous and cultured. Always a sympathetic student of human nature, he has acquired an insight into its operations in the many divers areas of its functions. He is broadminded. That means that he is tolerant of the foibles and vagaries of the folk as well as alive to all the major tendencies toward constructive development. He is not academic. His decisions are arrived at through avenues of practical experience. He has learned how to gage the relative importance of various selling methods. He knows to a dot what to expect from any given method of merchandising in any stated circumstance. For years he has been a close observer and a firm advocate of intelligently devised window exhibits as powerful aids in the extension of retail trade.

The photographs and descriptions of the window exhibits entered in the Competition were submitted to these three judges under key numbers. That is to say, in compliance with the terms of the contest, each photograph and description was signed by a fictitious name or device, and the same name or device was written on the cover of a sealed envelope containing the real name and address of the contestant. The purpose of this condition was to eliminate any untoward influence which might subconsciously exert itself upon the judges if they should chance personally to know any one of the contestants. The judges gave full and deliberate attention to each entry. There being no considerable difference in the merits of the several exhibits, great care was exercised in deciding upon the order of excellence.

The four window displays, together with descriptions thereof, which were awarded the cash prizes will

be reproduced in halftone engravings in forthcoming issues of AMERICAN ARTISAN AND HARDWARE RECORD.

The Decision of the Judges.

TO AMERICAN ARTISAN AND HARDWARE RECORD:

It is with pleasure that we inform you that, without any previous compromise or agreement, we were able to reach a unanimous decision with regard to the awarding of the cash prizes in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition which closed November 1, 1918. Naturally, we were gratified to be able to make this statement, as each of us feels his self-confidence deepened by finding his judgment upheld by the others without argument or discussion.

We are united in commending the Window Display Competition department of your excellent publication. Beyond cavil, the practical instruction in the art and science of window exhibit, which is given from week to week in its column has been instrumental in setting many a retailer firmly upon the high road to success. Utilizing window space to the utmost of its possibilities is a form of publicity which every dealer should be taught to practice.

In carefulness of planning, cleverness of arrangement, and pulling force, the window exhibits submitted for our decision were all of an uncommonly high grade. We have awarded the prizes to the best in the collection in the following order:

First prize, photograph marked "3."
Second prize, photograph marked "6-A."
Third prize, photograph marked "7."
Fourth prize, photograph marked "1."

We appreciate the compliment of having been selected to act as judges in this competition. We are conscious of having used great care in making our decisions. We are sincerely,

IRVING S. KEMP.
H. B. MACRAE.
H. W. BEEGLE.

After the judges reached the final decision in the awarding of the cash prize, the sealed envelopes containing the names and addresses of the contestants were opened. It was found that winners of the competition are the following in the order named:

First prize, $50.00 in cash to H. W. GOELLER, care William K. Toole Company, Pawtucket, Rhode Island;

Second prize, $25.00 in cash to WALTER J. SMITH, care Odell Hardware Company, Greensboro, North Carolina;

Third prize, $15.00 in cash to ANTON F. KRCMA, care of J. J. Stangel Hardware Company, Manitowoc, Wisconsin;

Fourth prize, $10.00 in cash to L. T. SHANER, care The Secrest-Shaner Hardware Company, Circleville, Ohio.

By unanimous agreement the judges decided that special honorable mention be awarded the following:

Honorable Mention.

FRANK J. PRINCE of the Keckonen Hardware Company, Calumet, Michigan.

FRED AYE of W. A. Dolph, 6908 Wentworth Avenue, Chicago.

JOE YOUNG of the Young Hardware Company, Bellevue, Iowa.

In addition to the joint report of the judges as set forth in the foregoing paragraphs, an individual statement was made by each judge as follows:

Statement of Irving S. Kemp.

TO AMERICAN ARTISAN AND HARDWARE RECORD:

The reasons which guided me in making my decision in awarding the cash prizes in this competition might be summed up in three words, attractiveness, persuasion, and conviction. A successful window display must first of all attract attention. If it is not seen, if it does not directly or indirectly force its way into the field of consciousness, it is so much waste effort

Irving S. Kemp.

so far as sales are concerned. Besides attracting notice, its arrangement of commodities must be such as to persuade the observer to give it further attention. Having attracted his eye and persuaded his mind, it must carry to him the conviction of its usefulness or desirability. Mere artistry alone will not bring about this three-fold effect. Neatness, harmonizing color arrangement, and goods of seasonable character or of adaptability to the wants of a particular neighborhood, all are indispensable to a sales-producing window display. These qualities I judge to be present in the four window exhibits awarded the cash prizes.

Yours very truly,

Irving S. Kemp

Chicago, Illinois, November 26, 1918.

Statement of H. B. Macrae.

TO AMERICAN ARTISAN AND HARDWARE RECORD:

Naturally, I asked myself how would such a window display affect me, when I picked up the photograph and read the description of each entry in your Window Display Competition. From the written descriptions in conjunction with the photograph I endeavored

to visualize the color scheme of each exhibit, with a view to determining whether it was of such a nature as would be grateful to the vision or not. I recognize the prime importance of seizing and holding the attention of the passer-by. If the appeal of the window exhibit is merely to the curiosity of the observer, by grotesque figures or straining after sensational design, no lasting effect is achieved. After the curiosity has been satisfied, the passer-by is very likely to resume the trend of his way and forget the things he saw except

H. B. Macrae.

as examples of oddity. Commodities are put in a window in order that people may see them and buy them. Every artifice of display which does not lead to such a consummation is a waste of energy. In my judgment the photographs and descriptions awarded the cash prizes give ample evidence of possessing the requisites of successful merchandising. I am,

Very truly yours,

H B Macrae

Chicago, November 26, 1918.

Statement of H. W. Beegle.

To American Artisan and Hardware Record:

I can appreciate the difficulties which King Solomon encountered in certain trying historical circumstances. He was confronted with a dilemma which would cause any but the wisest of men to tear his hair out by handsful or to retire to the obscurity of private life undisturbed by judicial entanglements. One of the most perplexing tasks which I have ever undertaken was that of deciding upon the relative sequence of merits of the four window exhibits which have been awarded the cash prizes in American Artisan and Hardware Record Window Display Competition. I gave preference to the exhibits in the order in which they appear in our joint report. The other two judges selected the winners in the same order. I feel, therefore, that my judgment is corroborated by the wisdom of my associates and that I have rendered impartial justice in arriving at the decision. I appreciate

H. W. Beegle.

the opportunity to be of service to your readers in this matter.

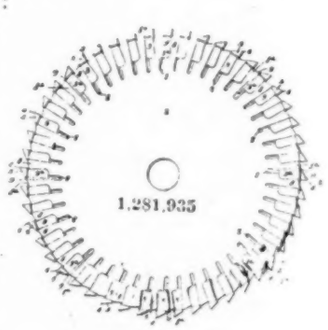
Right truly yours,

H. W. Beegle

Chicago, November 26, 1918.

OBTAINS PATENT FOR INSERTIBLE TOOTH SAW.

Samuel T. Freas, Trenton, New Jersey, assignor to Henry Disston and Sons, Incorporated, Philadelphia, Pennsylvania, has procured United States patent rights, under number 1,281,935, for an insertible tooth saw, described herewith:



The combination in a circular saw, of a blade having a series of recesses in its periphery arranged comparatively close together and forming projections, the recesses being wider at the base than at the outer end and a series of tapered teeth, the majority of the teeth being a size to fit the recesses while the remainder of the teeth are less in width than the recesses; and wedges adapted to be driven between the last mentioned teeth and the walls of the recesses.

Money and time are the heaviest burdens of life, and the unhappiest of all mortals are those who have more of either than they know how to use.—Dr. Johnson.

ORGANIZATION IS ESSENTIAL FACTOR IN COMMUNITY BUILDING.

Organization of the merchants in any town, if only for the exchange of ideas, would be beneficial. If such organization were to put into the development of the community only a small portion of the constructive power which its members use in building up their own businesses, the results attained would be a revelation —the merchants would wonder why they hadn't got together before.

There has existed between merchants generally a feeling of suspicion which has worked to the disadvantage of all. This was brought out clearly in a recent investigation conducted by an expert in the United States.

In dealing with the subject, he pointed out the need of team work and cooperation, first among the bankers and business men, and second by both these classes and by the farming communities. He pointed out that there were too many merchants in country towns who are disloyal to each other through lack of confidence. Proceeding further, he said:

"Competition and business rivalry have tended to make enemies of these classes rather than friends and coworkers. The local dry goods man cannot supply the wants of the banker's wife and family because his stock is not fine enough, hence they trade by mail or visit the department store. Let me remind such a one that a town that is good enough to live in should be good enough to spend your money in. If you can not spend your money where you make it, you are sucking the life blood of your town and you ought to move. The lumberman and the hardware merchant and their families are just as often guilty of the same practice, and they wonder why the town does not improve, and business prosper. What inducement let me ask, for example, is there for the local dry goods store to carry in stock goods fine enough for the bankers', the lumbermen's, and the hardware merchants' family? None whatever. This being too often the case, how can the banker expect the merchant, whose note he holds, to meet his obligations if there is taken away from him the only means whereby he may be able to meet them —his profits on goods sold to his neighbors?"

The success, then, of community building would appear to be in getting together merchant and farmer, blotting out the corporate limits, extending the influence of the commercial club and the business organizations to cover the country surrounding.

Some few towns have awakened to the situation and are inviting cooperation. They are also spending money on publicity, and are seeking to do everything possible to promote the feeling of friendship and cooperation with all classes. The wide application of the foregoing to rural communities would do much to solve the problems of the rural merchants and place them on a footing where they could effectively offset the inroads of strong outside competition, which is a destructive factor in the upbuilding of any community.

The advent of the automobile as applied to the farmer will result in his getting out to see other towns and cities in his vicinity, and when he has investigated what is being shown and worn along with the prices charged, he will, in nine cases out of ten, decide that he is getting mighty good value right in his own town. There is no doubt, too, that a large proportion of mail order business has been the result of the farmer or his wife having to face a long buying trip over roads that were none too good when the purchase could be made simply by writing a letter. The development of good roads, then, and the increase in the number of autos, which shorten the miles, should mean the elimination of a big proportion of outside competition.

SAVES LABOR IN HANDLING GOODS.

Dealers in every walk of life are always ready and anxious to obtain labor-saving devices. At the present time, help is very hard to obtain and retailers are eager and willing to grasp any product that will lighten their labor. Dealers thus handicapped will be pleased to learn of the elevator shown in the accompanying illustration, made by Kimball Brothers Company of Council Bluffs, Iowa. This hand elevator can be changed to a direct connected electric elevator with little trouble. The elevator depicted herewith is the Number 2 which has a capacity of eighteen hundred pounds. The motor, controller and winding machine are all in one piece when changed to an electric. The elevator is operated by a cable passing down to the hatchway so that by pulling down on the cable, the current is thrown into the motor for raising the platform. Conversely, pulling up on the cable reverses the current in the motor thereby running the motor in the opposite direction, and lowering the platform. An automatic stop is used on the platform by means of which the elevator can be stopped at any floor without trouble. It may also be locked on any floor desired. For further details, price lists and catalog, dealers should address the Kimball Brothers Company of Council Bluffs, Iowa.

Elevator Made by Kimball Brothers Company, Council Bluffs, Iowa.

WILL DISCONTINUE ALLOCATION OF STEEL AFTER DECEMBER FIRST.

According to an announcement made by Steel Administrator Replogle, allocations of steel by the War Industries Board will be discontinued after the first of December. Following that date, buyers of steel will deal directly with the producers. Weekly reports of production and shipment, however, are to be made by the steel manufacturers to Mr. Replogle until the end of the present year. It is expected that the removal of all restrictions on the distribution of steel to commercial customers will result in a more prompt filling of orders in the hardware industry. The first quarter of the new year, therefore, will probably be characterized by a considerable advance in the return to normal conditions.

DOOR HANGER IS STOUTLY MADE.

In the accompanying illustration is shown the Richards-Wilcox Door Hanger, made by Richards-Wilcox Manufacturing Company of Aurora, Illinois. The wheels on this hanger are of grey iron, lathe turned, and two and a quarter inches in diameter. They are finished in black enamel or galvanized. The adjustment is only lateral and there is a flexible joint. The apron is six inches long, hinged, three and a half

Richards-Wilcox Door Hanger, Made by Richards-Wilcox Manufacturing Company, Aurora, Illinois.

inches wide, one-eighth inch thick and punched for five-sixteenths inch bolts. These hangers are made for doors one and three-quarters to two and a half inches thick. These door hangers are said to possess the qualities of strength, durability and ease of operation, and they are only one type of the many different kinds made by this Company. The Richards-Wilcox Company needs no introduction at this time as they are known to have a reputation for products of particularly high quality. It will, therefore, be noted that when this concern makes a claim for the reliability of its goods, dealers need have no fear of trusting them. For further particulars and copy of their catalog, dealers should address the Richards-Wilcox Manufacturing Company of Aurora, Illinois.

EXTENDS USE OF TRADE ACCEPTANCE TO RETAIL CUSTOMERS.

What promises to be a positive advantage to retail merchants is the putting into operation by the Morris Plan Company of trade acceptances on articles sold at retail with deferred payments. The purpose is to supply the "missing link" in the field of trade acceptances, which heretofore have been used by the manufacturer, wholesaler, and retailer, but not by the ultimate buyer and consumer of goods. It is now planned to inaugurate a system, whereby an acceptance would be given by the consumer to the dealer, with the hoped-for result of popularizing the use of acceptances all along the line.

According to the Morris Plan of Retail Trade Acceptances, now worked out, retail acceptances will be made available in the purchase and sale of many standard articles, such as typewriters, cash registers, washing machines, electric and gas fixtures, adding machines, office fixtures, passenger and freight elevators, and numerous other articles. Retail Trade Acceptances are designed to take the place of the existing "partial payment open-book accounts" which a retailer has to "carry" with a customer for a period of weeks or months while the payments are being made, and as a result usually adds a considerable margin to the purchase price in order to cover the expense and risk.

On buying one of these articles, the purchaser will be asked to sign a trade acceptance along with a lien on the property for the dealer's protection. The dealer in turn will discount the acceptance for account of the purchaser at a Morris Plan bank. The plan provides for weekly or monthly payments, to be made either to the dealer or to the Morris Plan bank. When payment is completed, the purchaser's acceptance is cancelled and returned to him.

It was learned that a group of banks has become interested in the plan, and has tentatively arranged to rediscount the retail trade acceptances which are taken by the Morris Plan banks.

WARNS AGAINST BOND TRICKERY.

Some get-rich-quick concerns are endeavoring to persuade patriotic Liberty bond holders, whom they know will not sell outright their Liberty bonds, to turn over their Liberty bonds to these companies as security for a loan and with the money thus borrowed purchase stock in their companies.

A Liberty loan bond is the safest investment in the world, and a prudent man will very carefully investigate any effort to induce him to exchange it for a less safe investment. This lending one money on Liberty bonds as security to purchase stock in the lender's company is in many cases only a thinly disguised method of exchanging stock of doubtful value for Liberty bonds of unquestioned value.

It is a good business and it is patriotism to hold your Liberty bonds.

If you can do better yourself—don't trust it to others.

IS MADE TO WITHSTAND HARD USAGE.

All the parts of the screw wrench, made by Bemis and Call Hardware and Tool Company, Springfield, Massachusetts, shown in the illustration herewith, are said to be carefully case-hardened by improved methods to withstand the severe usage which a wrench must meet. The handle frame and bolster is all in

Screw Wrench Made by Bemis and Call Hardware and Tool Company, Springfield, Massachusetts.

one piece and is braced powerfully. The frame is forced onto the wrench bar and is riveted in place both on the tip and with a lateral pin rivet. This frame has selected hard wood sides which are locked, placed under pressure and riveted securely. The operating screw is made of high grade steel and is solid. The slide is manufactured of very tough semi-steel and can withstand great strain because it is especially constructed by reinforcement to the jaw. The bar is forged from special open hearth steel, particularly suited to wrench purposes. It is made oval front and back. This characteristic is claimed to give additional stock and strength over the ordinary form of square wrench bar. By making application to the Bemis and Call Hardware and Tool Company of Springfield, Massachusetts, dealers may secure its latest catalog and more complete details of its products.

HOLD YOUR LIBERTY BONDS.

The money invested in Liberty Bonds if kept so invested until peace is fully established will be worth much more then than now.

Every provident man and woman in the United States who holds his or her Liberty Bonds may find the money so invested worth twice as much in purchasing power after the war as now. How sure and safe an investment it is, and how profitable an investment, to keep your money invested in Liberty Bonds until its purchasing power becomes greater than at present. It is a better investment than wildcat stock. It is a better use and wiser use of your money than speculating with it.

OPPORTUNITIES FOR FOREIGN TRADE PRESENTED BY BUREAU OF FOREIGN AND DOMESTIC COMMERCE.

The Bureau of Foreign and Domestic Commerce through its Special Agents, Consular Officers and Commercial Attachés is receiving information of opportunities to sell hardware and kindred lines in several foreign countries. Names and locations will be supplied on request to the Bureau in Washington or its District Offices. Such requests should be made on separate sheets for each opportunity, stating the number as given herewith:

27705.—The representative of a firm in Sweden who is at present in the United States desires to secure an agency for the sale of general merchandise in Scandinavia, Russia, and Finland. References.

27712.—A business man in England wishes to secure an agency for the sale of hardware, motor accessories, and other articles requiring expert demonstration and technical knowledge for placing goods on the market. Reference.

27716.—A firm in Brazil desires to purchase and secure an agency for the sale of all kinds of merchandise and material exported to Brazil, Uruguay, and Argentina. The firm proposes to establish a branch office in New York for the purpose of facilitating commercial relations with American firms. Quotations should be made f. o. b. New York. Correspondence may be in English. References.

27720.—A firm in Brazil desires to represent American manufacturers and exporters of iron, steel, and metals; agricultural machinery; hardware in general; etc. Correspondence should be in Portuguese, Spanish, or French. References.

27724.—An agency is desired by a man in Switzerland for the sale of iron and steel products, etc. Correspondence may be in English. References.

27725.—A man in Argentina wishes to secure an agency on a commission basis for the sale of galvanized sheets, corrugated iron, nails, and building iron. Quotations should be made f. o. b. New York with approximate estimate of freight rates to Buenos Aires. Correspondence should be in Spanish. References.

COMING CONVENTIONS.

Oklahoma Hardware and Implement Association, place to be announced later, December 10, 11 and 12, 1919. W. B. Porch, Secretary, 204 Indiana Building, Oklahoma City, Oklahoma.

National Hardware Association, Atlantic City, New Jersey, December 11, 12 and 13, 1918. T. J. Fernley, Secretary, Philadelphia, Pennsylvania.

American Hardware Manufacturers' Association, Atlantic City, New Jersey, December 11, 12 and 13, 1918. F. D. Mitchell, Secretary, 4016 Woolworth Building, New York City.

Western Retail Implement, Vehicle and Hardware Association, Kansas City, Missouri, January 14, 15 and 16, 1919. H. J. Hodge, Secretary, Abilene, Kansas.

Pacific Northwest Hardware and Implement Association, Spokane, Washington, January 15, 16 and 17, 1919. E. E. Lucas, Secretary, Hutton Building, Spokane, Washington.

Oregon Retail Hardware and Implement Dealers' Association, Portland, January 21, 22, 23 and 24, 1919. E. E. Lucas, Secretary, Hutton Building, Spokane, Washington.

Mountain States Hardware and Implement Association, Denver, Colorado, January 21, 22 and 23, 1919, Brown Palace Hotel. W. W. McAllister, Secretary, Boulder, Colorado.

Indiana Retail Hardware Association, Indianapolis, Indiana, January 28, 29, 30, and 31, 1919. M. L. Corey, Secretary, Argos, Indiana.

Nebraska Retail Hardware Association, Omaha, February 3, 4, 5 and 6, 1919. Nathan Roberts, Secretary, Lincoln, Nebraska.

Wisconsin Retail Hardware Association, Milwaukee, February 5, 6, 7, 1919. P. J. Jacobs, Secretary, Stevens Point, Wisconsin.

Pennsylvania and Atlantic Seaboard Hardware Association, Pittsburgh, Pennsylvania, February 11, 12, 13, and 14, 1919. Sharon E. Jones, Secretary, Fulton Building, Pittsburgh, Pennsylvania.

Iowa Retail Hardware Association, Coliseum, Des Moines, February 11, 12, 13 and 14, 1919. A. R. Sale, Secretary, Mason City, Iowa.

Michigan Retail Hardware Association, Kalamazoo, February 11, 12, 13, 14, 1919. Arthur J. Scott, Secretary, Marine City, Michigan.

North Dakota Retail Hardware Association, Fargo, February 12, 13, 14, 1919. C. N. Barnes, Secretary, Grand Forks, North Dakota.

Illinois Retail Hardware Association, Chicago, Hotel Sherman, February 17, 18, 19 and 20, 1919. Leon D. Nish, Secretary, Elgin, Illinois.

Ohio Hardware Association, Columbus, Ohio, February 18, 19, 20 and 21, 1919, Columbus, Ohio. James B. Carson, Secretary, Dayton, Ohio.

Minnesota Retail Hardware Association, St. Paul, February 18, 19, 20, 21, 1919. H. O. Roberts, Secretary, Metropolitan Life Building, Minneapolis, Minnesota.

New York State Retail Hardware Association, Buffalo, New York, February 25, 26, 27 and 28, 1919, Hotel LaFayette. John B. Foley, Secretary, 607 City Bank Building, Syracuse, New York.

Kentucky Hardware and Implement Dealers' Association, Tyler Hotel, Louisville, February 25, 26, 27, and 28, 1919. J. M. Stone, Secretary, Sturgis, Kentucky.

Michigan Sheet Metal Contractors' Association, Kalamazoo, March 5, 6, 7, 1919. Park-American Hotel. F. E. Ederle, 1121 Franklin Street, S. E., Grand Rapids, Michigan.

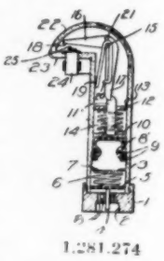
AUTOMOBILE ACCESSORIES SOLD BY HARDWARE DEALERS

RADIATOR COVERS ARE PROFITABLE AUTOMOBILE ACCESSORY.

Experience has amply demonstrated that the engine of an automobile will hold its heat for a long time when the radiator and hood are protected against cold by a good cover. The most serviceable covers are lined with felt and made up in leather or fabrikoid. These are so designed that part or all of the radiator may be covered up according to the severity of the weather. Radiator covers are staple accessories and no progressive dealer will neglect to push their sale at this season of the year.

ACQUIRES PATENT FOR TIRE SIGNAL AND AUTOMOBILE JACK.

Louis H. Berry, Minneapolis, Minnesota, has obtained United States patent rights, under numbers 1,281,274 and 1,281,275, for a tire signal and an automobile jack, described herewith:


1,281,274

Number 1,271,274: In a tire signal the combination of a shell attachable to the valve stem of a tire and having apertures to allow air to enter the end of the shell attached to the stem of the tire, a spring controlled pin for opening the valve in the tire stem, a disk carried by said pin having apertures therein to allow the passage of air therethrough, a flexible air seal positioned in said shell above said spring controlled pin, a plunger spring controlled and normally pressed against said air seal positioned above said air seal in said shell, a latch carried by said plunger, a bell crank forming a trigger at one end engageable with said latch and a hammer at its other end, a spring to actu ate said hammer when it is released from said latch, and means for carrying a cartridge in juxtaposition to said hammer so that it may be fired by said hammer when it is released from said latch.

1,281,275

Number 1,281,275: In an automobile jack the combination, with the chassis of an automobile, of a base carrying a worm gear case, a worm gear having a screw extension extending coaxially therewith carried by said case, a worm carried by said case, means for driving said worm, a protecting sleeve projecting downwardly from said gear case, a sleeve having a foot on its lower end slidably mounted in said downwardly extending sleeve, a nut carried by the upper end of said lower sleeve, co-acting with said screw extension, an upwardly extending tongue carried by said lower sleeve and having rack teeth on its upper portion, a sector of a gear carried by said base, the teeth being adapted to engage with said rack teeth, and means carried on said base or locking said jack when elevated to a carrying position.

EXPLAINS CAUSE OF ENGINE KNOCKING.

Customers of the dealer in automobile accessories have a habit of asking him questions concerning various troubles which they encounter in operating their cars. It is advisable, therefore, that they keep well informed about the proper way of handling such difficulties. A somewhat common source of annoyance and worry to the motorist is knocking of the engine of his car. This may be caused by worn cylinders, loose bearings, advancement of the spark too far, etc. The sounds given forth by the knocking vary according to the cause. A dull pounding is generally due to a loose condition of the main bearings. When the connecting rods are worn and need taking up, there is usually a light tapping sound similar to the noise of a hammer upon metal. A peculiar slapping sound is produced by worn cylinders and pistons. This, of course, denotes a car which has been in use a long time. Sometimes a distinct humming is heard coming from the rear axle. This may be traced to a faulty adjustment of the differential or to a wearing down of the bearings, on either side of the differential.

POINTS OUT A HELPFUL SERVICE.

Good will is gained and held by a composite of quality and service. Often the latter—in its immediate results—does not increase the contents of the cash drawer. Nevertheless, it is a magnet which attracts trade and, therefore, brings profit in the long run. A case in point is the care of the storage battery in winter months. Many motorists complain of the solution in the battery freezing when the thermometer registers low temperatures. The accessories dealer should advise his customers to keep their storage batteries fully charged at all times. When the electrolytic is kept up to strength, there is no danger of freezing.

REMOVES A SOURCE OF COMPLAINT.

A number of automobile accessory dealers who sold hot spots last winter received complaints from their customers to the effect that the hot spot does not help make starting any easier. These complaints and the dissatisfaction attending them can be avoided by explaining to the customer that it is not the function of the hot spot to render starting less troublesome. The hot spot does not get hot until the engine has been running long enough to heat the exhaust. This simple explanation will prevent complaint and remove misunderstanding.

ADVERTISING CRITICISM AND COMMENT

Helpful Hints for the Advertisement Writer

Some times it is good policy to ask a question in an advertisement. In the case of S. R. Page whose advertisement is herewith republished from the *Elkhart Daily Review,* Elkhart, Indiana, the query serves to arouse interest. Probably there is not a single householder in any community who has not been more or less perplexed or worried by the fuel restrictions made necessary by war conditions. These restrictions will undergo very little modification this winter. The importance, therefore, of putting every warm air heater into the best possible condition requires no debate. Those who have not yet had their heaters repaired will not resent the question. On the contrary, they are likely to respond to the interrogation by calling upon the advertiser for his services. The last line of the advertisement is commendable. In stating that he is agent for a standard warm air heater (with an established reputation for efficiency) the advertiser presents credentials to the public which warrant confidence in his business.

* * *

An advertisement which seizes upon the imagination of the reader is that of Bush and Handwerk,

which appeared in the *Joliet Evening Herald-News* of Joliet, Illinois. The quaint illustration at the top is effective. The first line in display type makes clever use of slang to give a friendly tone to the text. It is followed by an extremely persuasive message couched in homely phrases which breathe a sort of hail-fellow-well-met spirit. There is a genial sprightliness in the wording which puts the advertisers on good terms with the prospective customer from the start. The statement of prices, "from $5 and up," rounds out the good qualities of this advertisement.

* * *

An example of seasonable publicity is the advertisement of Ben Popken which was published in *Oak Leaves,* Oak Park, Illinois. It is an announcement of service rather than a specific statement of prices. Being thus general with reference to the supply of

utensils and cutlery for the Thanksgiving dinner, the advertisement is not open to the charge of vagueness. Indeed, it possesses a strong element in the sentence: "We have everything to prepare your Thanksgiving dinner economically and tastefully." The addition of the adverb, "tastefully," gives a pleasing effect to the matter of economy. The average person associates the word "economy" as applied to food with viands which have unfamiliar flavors and which are not as palatable as they might be. Therefore, the suggestion of tastefulness with economy is certain to arrest attention. The layout of this advertisement is well balanced, the illustration is clear and pertinent, and the impression conveyed to the eye is favorable. The liberal allowance of white space deserves unqualified approval.

HEATING AND VENTILATING

REGULATES THE PRICE OF ANTHRACITE TO PROTECT THE PUBLIC.

Retail prices of domestic sizes of anthracite coal will not be allowed to advance beyond the actual additional labor cost involved in the recent wage adjustment to anthracite miners, where other factors remain as they were, the United States Fuel Administration announces.

As was announced at the time the wage adjustment was promulgated the public will be fully protected. The Fuel Administration will undertake to protect the consumer, if instances of overcharging are brought to the attention of the local fuel administrators, who have the authority and power to act.

Gross margins of profit allowed retail coal dealers throughout the United States vary in general from $1.75 to $2.75 a ton, according to local conditions, and from that amount they must meet all the costs of conducting their business. These costs include wages paid drivers, yard labor, and office help; the purchase, cost, and upkeep of trucks, wagons, and other equipment; loss of coal in transit; degradation or the breaking up of the larger sizes by handling, and enable them to make a return of their investments. The cost to the retailer is the price at the mine plus freight, except in certain situations when a jobber's profit of 20 cents a ton is allowed east of Buffalo and 30 cents west of Buffalo.

To supplement the prices of coal at the mines the Fuel Administration established regulations governing the maximum retail gross margins which may be charged by retailers. The local fuel committee for each community ascertains, after a careful investigation of the retailer's cost of conducting his business, what it considers the proper maximum retail gross margin for the community.

The facts and figures obtained, together with the local committee's recommendations, are forwarded to the State fuel administrator who then establishes the maximum retail gross margin for the community affected.

The maximum retail price of coal in the community is then determined by adding this maximum retail gross margin to the price of coal at the mine and to the transportation charges.

TELLS HOW TO SAVE FUEL.

A series of very instructive articles on fuel economy has been written by A. J. Allen of the Keith Furnace Company, Des Moines, Iowa, and published in the *Des Moines Evening Tribune*. Works of this sort is a distinct service to the warm air heater industry because it trains the people in the proper and intelligent care of warm air heaters. Undeniably, one of the chief obstacles to the more general use of warm air heaters has been the lack of accurate knowledge of their care and management on the part of the average citizen. This point is emphasized by Mr. Allen in one of his articles as follows:

The automobile owner who knows how to care for his car and understands the principles governing its successful operation has a distinct advantage in mileage, service, operating expense and satisfaction not obtainable by another who lacks this knowledge. The modern warm air heater is a mystery to many and yet ignorance of the principles under which it operates does not nullify its usefulness, for in spite of this fact it works. The warm air heater heats by circulation instead of radiation, as is the case with the stove, steam or hot water. When air is heated it expands; therefore, when a fire is started in the warm air heater the air already within the air chamber becomes heated, expands and flows into the rooms above, where it immediately exerts its influence on the colder air, forcing it down to the floor and into the cold air intake, where it is conducted down to the base of the warm air heater, to again be passed over its surfaces, heated and returned. And this process of air rotation, varying in velocity of movement and temperature attained, is wholly dependent on the condition of the fire within the warm air heater, and the air supply thereto.

Remember this one fact, you cannot blow air into a jug which is already full, neither should you expect the warm air from your heater to flow into a room which has no air outlet. The door should either be shortened at the bottom or left ajar to allow the cold air an opportunity to exhaust into the main cold air intakes.

A few years ago the writer was called one cold night to one of our best homes for "first aid" on heating trouble. A careful examination revealed a good standard warm air heater well installed, good fire, in fact ideal conditions to produce better results than were being obtained. On lifting up one of the main cold air plates he found an old rug nicely padded in over the cold air opening and on asking for an explanation of its presence there was told "They knew it was cold air so just closed it up, thinking thereby to save fuel, as they did not care for cold air anyway." Keep your cold air intake clean and open always. You can't give your warm air heater too much air, while too little robs you of comfort and Uncle Sam of the fuel you are wasting, endeavoring to heat without it.

The warm air heater occasionally develops symptoms of insubordination. Among the pipes leading from your warm air heater, there will be found an occasional drone—one that refuses to work, but in spite of its seeming obstinacy it is easier to start on a cold morning than a Ford car, if you know how.

Since the economical heating of your rooms depends upon the volume of warm air delivered thereto, it is altogether important that you know how to make each pipe deliver its quota of heat.

The reason for a pipe not heating may be due to one of many causes. Quite often it is due to an insufficient supply of cold air to the warm air heater, or perhaps at night when the fire is low and windows are left open, the incoming cold air, seeking the lowest point, will settle down into the register and pipe, and overcome the feeble resistance of the warm air.

When this condition obtains, start up a brisk fire and close temporarily the dampers in all other hot air pipes, thus forcing the full volume of heat generated through this one pipe, allowing it to run this way but for a few minutes or until the current of cold air is completely dispelled and the pipe becomes thoroughly warmed, after which the dampers can again be opened in the other pipes and the warm air will continue to flow.

The idea is prevalent with some people that if a given quantity of fuel is used they should expect in return a given quantity of heat. The real result, however, will depend upon the skill of the operator, that is, how the firing is done and how the control dampers are regulated.

One of the most common mistakes made by those who wish to economize on fuel, is too frequent firing. Once a day in mild weather and twice daily in the more severe weather should suffice, if properly done.

First see that the firepot of your heater is free of all dead ashes and clinkers and that all ashes are removed from the ash pit; then put in such fuel as would be required for the day, increasing the amount according to the severity of the weather. By all means keep a deep fire, don't try to carry the fire too low in the firepot. The top of the fire should always be level with the bottom of the feed door and in extreme cold weather it should be rounded up well above this point.

For mild weather firing, sufficient ashes may be left on the grate and in the pot so that the fire will be up level with the feed door. Remember this one fact, if a considerable quantity of fuel is fed at one time, instead of lesser quantities at frequent intervals, the saving in fuel will be quite marked.

When the fuel is placed in the heater, turn on the direct draft damper until the heavier gases are consumed and the house has attained a temperature agreeable to its occupants, then close the direct draft damper and open the check damper. In this neutral condition the fire within the heater should continue to generate heat and maintain an almost unvarying temperature for many hours. Why? Because you have within the heater, a large body of coked fuel all aglow, expending its force against the radiating surfaces, whereas much of the heat value of your fuel would escape by way of the flue if fed in lesser quantities more frequently.

While these suggestions may not furnish a complete panacea for all your heating troubles, the insistent application of the above suggestions will save fuel, and will make more comfortable those whose task it is to "keep the home fires burning."

HAS THE EFFECT OF A DOUBLE HEATER.

The Weir Warm Air Heater, manufactured by The Meyer Furnace Company of Peoria, Illinois, shown in the illustration herewith, is said to be really a double heater. Combustion takes place in the first or main drum, and this in itself possesses a large heating surface. The drum is made of one sheet of boiler plate, into which a heavy dished head is inserted. It is riveted with heavy rivets and after this is thoroughly calked until absolutely water and gas tight. The bottom of the ash pit is of the same material and put in in the same gas tight manner. The smoke collar, ash tube, and feed tube are all made of high grade gray iron castings, thoroughly riveted in place. The extra drum or radiator is made in two forms, the crescent shape for portable style and the round with open center for brick setting. The main drum and radiator are connected by a flanged coupling. This is packed with a reinforced asbestos gasket. The surface of both drums is upright and in this way the air follows it naturally after beginning to warm. The upright walls are also said to be self-cleaning and not to retard radiation. The grates in the Weir heater are very simple and easy working. They operate in such a manner as to free themselves from clinkers and clear the fire from ashes without loss of fuel. They are durable and will stand heavy wear and tear. The center and side bars become interchangeable by merely reversing the cog wheel. The Company manufactures two styles of grates: one for soft coal and a special style with draw center for hard coal. More detailed information and price lists can be obtained by addressing The Meyer Furnace Company, Peoria, Illinois.

Weir Heater, Made by The Meyer Furnace Company of Peoria, Illinois.

GIVES OUT FUEL INSTRUCTIONS FOR MIDDLE WEST CONSUMERS.

Personal and individual instruction in the use of bituminous coal will be given householders in the cities of Illinois, Indiana, and Michigan through instruction stations soon to be opened by the fuel administrators of those states, with the approval of the United States Fuel Administration.

Through the functioning of the zone system of coal distribution, which has saved the country as a whole from any such coal shortage as was experienced last winter, householders in the Middle West have been deprived of a large part of the anthracite coal to which they were accustomed.

Methods of satisfactorily handling the new and, to many of them, entirely strange fuel, bituminous

coal, which they must use this winter, will be explained by heating experts.

Large charts, which these experts will use in showing how to get effective results from bituminous coal, will reveal to the average householder many heat-regulating and coal-saving devices and attachments with which he never suspected his furnace was equipped.

IS EQUIPPED WITH EVAPORATING PAN.

In the accompanying illustration is shown the Gilt Edge Warm Air Heater made by R. J. Schwab and Sons Company of Milwaukee, Wisconsin. A noteworthy characteristic of this heater is that it is provided with an evaporating pan, to give the warm air its proper humidity. It can be attached to the casing at any point desired and can readily be taken out for the purpose of cleaning. It is also provided with a cover and it extends outside of the casing a sufficient distance to be conveniently filled, without removing it from the heater. This heater is furnished with ornamental regulating plate to be placed in the upper rooms and comes with chains and pulleys. The purpose of this is that both the front and check drafts may be regulated from the rooms above, doing away with unnecessary trips to the heater. The Company states it has made provision for easily cleaning the Gilt Edge Warm Air Heater through a cleanout opening properly placed in the radiator. This makes any part of the radiator readily accessible. The front of this heater is of cast iron and is of neat design. It has a large ash door and perforated lined feed door with jointed cold handles, and the doors and door frames are ground to give an unusually tight joint. This gives a complete control of the drafts, it is said. When ordered, a superior quality of casings is provided. The outer sheet is of heavy galvanized iron, covered on its inner surface with a thickness of asbestos fiber. The inside casings are made of bright tin, separated from the outside casings by corrugated galvanized iron separator strips. This maintains a uniform space throughout. The tin casing reflects the heat away from the outer casing and forms a chamber between it and the outside casing. A sheet of cool air passes from the bottom of the heater and carries any heat in this chamber to the top of the heater and then to the warm air pipes. Thus the heat is prevented from radiating into the basement. For further particulars, address R. J. Schwab and Sons Company, Milwaukee. Wisconsin.

Gilt Edge All Cast Warm Air Heater, Made by R. J. Schwab and Sons Company, Milwaukee, Wisconsin.

REMOVES RESTRICTIONS ON STORAGE OF BITUMINOUS COAL.

All storage restrictions on bituminous coal have been removed by the United States Fuel Administration in conformity to the action of the War Industries Board in cancelling its preferential industries list. Anthracite coal is not affected, however, by the ruling of the Fuel Administration.

Every industry and every householder in the country now may store as much bituminous coal as desired or obtainable, as the action of the War Industries Board removes the necessity for the Fuel Administration to distinguish longer among different classes of industrial plants.

The restrictions just raised provided for the accumulation by the consumers in the preference classes defined by the War Industries Board, of reserve stocks of bituminous coal, in accordance with their location in relation to various mine fields and their classification on the preference schedule.

All industries located farthest from distribution points, particularly those in New England and in the northwest are found not only to be well stocked, in accordance with Fuel Administration specifications, but in many cases have surpluses above those amounts

RAISES GRATE BY SHIFTING LEVER.

Special attention is called to the grate of the Pyramid Warm Air Heater, shown in the accompanying illustration, and made by The Forest City Foundry and Manufacturing Company, Cleveland, Ohio. By a simple shifting forward of the upright lever, the central part of the grate is raised. This consists of a center or heat to which are attached sliding bars, the construction of which is such that the height, when elevated, may be varied at will from the level position to seven inches when at the highest point. This action rolls the fire to the outside and forces the heat directly against the sides or radiating surface of the heater. Fresh fuel is placed in the middle which leaves the fire free to continue burning. The surface of the fresh fuel is immediately coked by the heat from this ring of fire. Almost complete combustion of all smoke and gases before the escape is caused by the conical shape of the heater concentrating the heat at the opening at the top. All these characteristics are well adapted to the cheaper grades of soft coal. By ordinary care in the operation of this grate and the supplying of fresh fuel, no more smoke will be emitted than from the use of hard coal. The ashes are entirely removed by the manipulation of the grate, even though the fire may

Pyramid Air Blast Warm Air Heater, Made by The Forest City Foundry and Manufacturing Company, Cleveland, Ohio.

be completely covered with ashes. When fresh fuel is supplied, there is said to be no stop in the radiation of heat as the shaking of the grate rolls the fire to the walls of the firepot. For further particulars, dealers should address The Forest City Foundry and Manufacturing Company, Cleveland, Ohio.

COPY OF GOVERNMENT BOOKLET IS FREE FOR THE ASKING.

Much interest has been aroused in the booklet on improving warm air heaters issued by the United States Bureau of Mines and published in full in two installments in the issues of November 16 and November 23, 1918, of AMERICAN ARTISAN AND HARDWARE RECORD. Copies of the booklet may now be obtained free of charge by writing to the Director of the Bureau of Mines, Washington, D. C., and asking for "Technical Paper Number 208."

O. P. Hood, chief mechanical engineer of the bureau, in reviewing Mr. Baker's paper, says: "Warm air heaters for house heating are used in such great numbers, especially the smaller sizes, that one would expect a considerable literature on the subject of their economical design, installation, and operation. As a matter of fact, there is much less to be found on this subject than on steam and hot water house-heating equipment, largely because of the difficulty of measuring the output from a warm air heater. The quantity of heat absorbed from the fire by either hot water or steam systems is rather easily measured by accepted methods, but it has proved a problem of some difficulty to as accurately measure the quantity of heat absorbed by the warm air heater. Hence the problem has been much less attractive as a laboratory investigation than problems having to do with steam or hot-water apparatus. There is, however, a real need for a larger body of information about the performance of warm air heater installations than is now available.

"Mr. Baker's article shows how interesting such problems can be, how really worth while it is for a good engineer to give them careful and ingenious attention. The Bureau of Mines is glad to print such material, which will not only help many users of warm air heaters but will also tend to stimulate investigation in this fertile field."

CASING RING THAT IS AIR-TIGHT.

The Walworth Run Foundry Company, Cleveland, Ohio, recognizes the fact that a warm air heater casing ring is a very important part of its structure. To perform its duty successfully, it must be air tight and made of serviceable material. In the accompanying illustration is shown the steel casing ring for warm air heaters made by this Company. These rings are made of individual measurements and requirements. They have lugs for double casings, and are also made without lugs for single casings. They are manufactured in full circles or in partial circles for cast fronts. These rings are guaranteed by the manufacturers to be exact in measurement and true in circumference. The Walworth Run Foundry Company of Cleveland, Ohio, are recognized as among the leading manufacturers of casing rings. Prices will be furnished upon application, and by addressing the Company dealers may secure their catalog and literature of their various other products.

Steel Casing Ring for Warm Air Heaters Made by The Walworth Run Foundry Company, Cleveland, Ohio.

WAR SAVINGS STAMPS WILL BE PUT ON SALE AGAIN NEXT YEAR.

Although the war is at an end, War Savings stamps as government securities will be issued again next year. They will be offered for sale together with Liberty bonds and Treasury certificates under a new organization known as the war loan board. The war savings campaign has attained such great success in creating patriots and transforming the habits of the people from waste and extravagance into thrift that the Government has decided to put the War Savings movement on a permanent basis. Under new organization the War Savings society is expected to be the main agency, not only for selling stamps regularly and continuously, but also for teaching the importance of saving and investing. Every man, woman, and child in the country will be expected to be a member of some War Savings society and to invest weekly in some form of War Savings securities. So great is the need for saving that plans have been formed for organizing the whole country into a great army of savers. The 1919 stamp will be in blue with the idea of distinguishing between the two issues. For mechanical reasons it will be a trifle smaller than the present one. The 1919 series will have the vignette of Franklin, the apostle of savings, instead that of Washington. The same thrift stamps and thrift cards will continue in use and be exchanged for $5 War Savings stamps as at present. The 1919 series will mature in 1924.

ADVERTISING KEEPS TRADE AT HOME.

If all the merchants in a town do some advertising, the people become interested in buying in that town. If the merchants make no announcements it is presumed they have nothing to announce, and the people cannot be blamed if they trade out of town.

Remember that it takes a great man to be kind under all circumstances, and a wise man not to submit to being made a fool of under any circumstances.

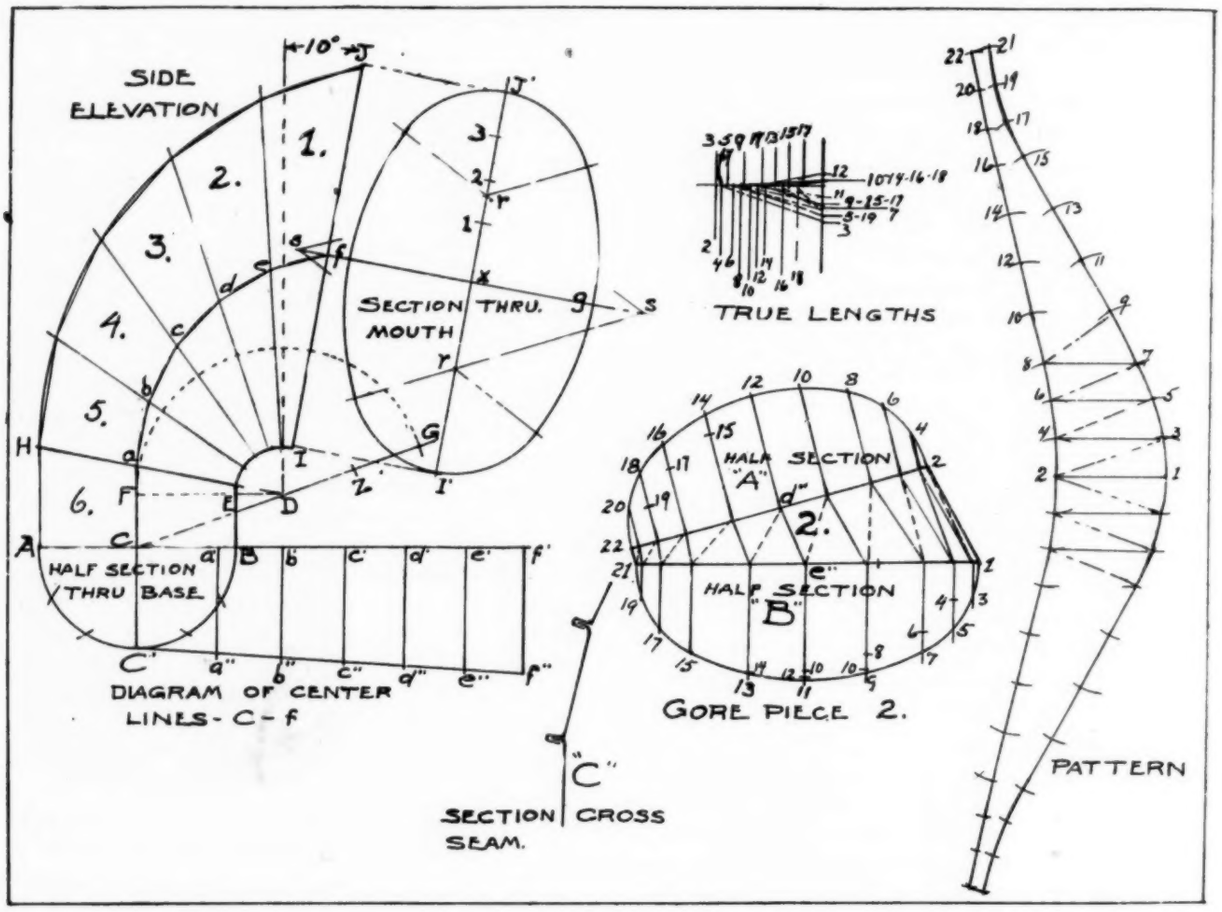
Remember that you are heir of all the ages, and make the experience of those who have paved the way count.

PRACTICAL HELPS FOR THE TINSMITH

PATTERNS FOR OVAL SHIP'S COWL.

By O. W. Kothe

In the past we have taken up the oval cowl by the segment method and also the round cowl by the gore method. Here we shall take up the oval method of developing a cowl by the gore method. This style is not very often used on account of the difficulty in making and the extra amount of work unless it is for ornamental purposes. Observe the distance A-B is the diameter of lower base. The throat D-E is made equal to ¼ the diameter of lower base A-B. Set dividers to center D and F, as radius, strike the arc F-G. Draw a line through point I, parallel to the lower base which will intersect point G, and establish point H. This line is not shown. Then draw a line G-D extending it to C, which is the axis for describing the heel and center lines. Set dividers to G, as center and H, as radius, strike the heel H-J making the amount of overhang 10 degrees. Then draw the mouth line J-D. By bisecting the line D-G in point Z, a center line F-f may be described. The mouth for the oval end may now be described making the width equal to two-thirds the length as J'-I' and f-g. The oval may be described by any one of a dozen different methods. In this case we take the short diameter and subtract it from the long diameter, as I-1. The remainder 1-J' is divided into three equal parts. Pick two of these parts and using X, as center mark points r-r on the center line. These are the centers for the end arcs. Next pick the space between r-r and using point x as center, marks points as at s-s. These are the new centers for the side arcs of oval.



Patterns for Oval Ship's Cowl.

Now it is necessary to find the true half diameter through each point of miter line as at a-b-c-d-e. We might add the miter lines are established by dividing the distance h-J into five equal parts. That is to make a six piece cowl. So draw the half section through base and pick the lines C-a-b-c-d-e-f, each one separately and step them off on the horizontal line as C-a'-b'-c'-d'-e'-f'. Square out lines from these points and make f'-f" equal to x-f of the section through mouth. By drawing line C'-f" we have the true slant or line of graduation from the lower base to the mouth. The lines a'-a"; b'-b"; c'-c", etc., are the true half diameters through those points in side elevation. With these true half diameters we are able to describe the half sections for the various miter cuts in the gore

pieces. To avoid confusion we reproduce the gore No. 2. This can be done by the triangling process working catty-corner from a base line. See so the center line e-d is accurately transferred as e″-d.″ Then making e″-11 equal to e′-e″ of diagram and z″-12 of section "A" equal to d′-d.″ Through these three points a half oval can be described similar as explained for the mouth of cowl. In fact, anyone of a dozen methods may be used just so the oval is uniform.

These half ovals or the end arcs and the side arcs are divided into equal parts and lines squared to the base line after which they are connected, giving the triangular effect in our working drawing. To establish the true lengths the sectional lines from "A" are subtracted from those in "B." We draw a horizontal and a vertical line of the diagram and pick the line 2-3 from our working drawing which we shall call the elevation and set it over on the horizontal line as 2. Then pick line 3 from half section "B" and set it on the vertical line as point 3; then 2-3 is the true length. Repeat and pick line 3-4 and set it on a horizontal line as point 3. Then subtract line 4 from "A" from line 3 of "B," in this case they are of equal length and so the line 3-4 is a true length. This process is continued working from one point to another and always subtracting the sectional lines to correspond with the elevation lines. The difference will be the rise and give the slant line.

To set out the pattern draw any line as 1-2 equal to 1-2 of elevation. Use the space 1-3 of section "B" and describe the small arc 3 in pattern. In the same way pick space 2-4 and using 2 in pattern as center describe the small arc 4. Pick the true length 2-3 and using 2 in pattern as center cross arcs in point 3. Next pick true length 3-4 and using the new point 3 as center cross arcs in point 4. Now describe the small arcs 5 and 6 and cross these arcs with lines 4-5, and 5-6 with true lengths. Continue in this way until points 21-22 are established. Lines are traced through all points where arcs cross seeing so no hills or hollows occur, and laps are allowed for making seams as at "C" or else arrange for riveting.

DIRECTORS ILLINOIS SHEET METAL CONTRACTORS HOLD MEETING.

The Directors of the Illinois Sheet Metal Contractors' Association met in Peoria on November 20th. Those present were President R. Jobst, Directors: Charles Louis, John Newman, Frank Eynatten and George Harms.

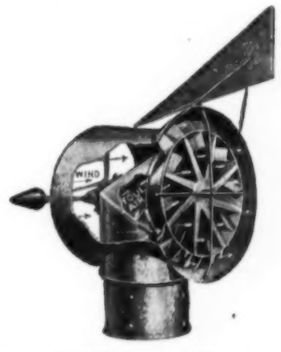
The matter of the next convention city was thoroughly discussed, but no action was taken, as it was the intention to investigate and see if some centrally located city may send an invitation; and it was the opinion that the convention should be held at a place where it may benefit the local association.

It was decided immediately to start a membership campaign. The Secretary was instructed to get in correspondence with sheet metal contractors in all the important cities in the state and to arrange for meetings and to send delegations to assist in this organization work. The Directors considered it advisable to recommend to the next convention that salesmen of sheet metals and other goods entering into our line, be accepted as associate members on payment of dues of $5.00 per annum. A request from a local association for change in the constitution and by-laws covering several minor points was presented, and a committee has been instructed to prepare a constitution and by-laws to be published prior to the next annual meeting, and presented to the convention. The directors also considered it advisable to be represented at the war emergency and re-construction convention, to be held in Atlantic City, December 4, 5, and 6, 1918.

The questionnaire sent out by the National Secretary pertaining to the above-named convention, was considered and the secretary instructed to prepare answers. The President reported that both the membership increase and the financial condition of the association, are in a very flourishing condition.

FAN THAT PREVENTS DOWN DRAFTS.

An important characteristic of the Bicalky Roof Fan Ventilator made by the Bicalky Fan Company of Buffalo, New York, shown in the accompanying illustration, is that it does not depend upon any difference in temperature for its action. A rotating fan wheel creates a vacuum and causes an upward circulation of air at all times. This insures positive ventilation, the Company states. It will be noted in the sectional view herewith that the wind comes in contact with the outer veins of a secondary wheel. This gives great leverage to the inner wheel. The patented construction also enables the Company to produce a fan that always



Bicalky Roof Fan Ventilator, Made by the Bicalky Fan Company, Buffalo, New York.

rotates by the moving outdoor currents of air. This outside wheel that receives the wind power rotates the inner fan wheel which in turn forms a suction on the neck of the ventilator. This gives the same fan suction on the neck of the ventilator as though it were motor driven and gives ventilation without any attention or power bills with the exception of oiling the ventilator one or two times a year. The manufacturers claim that both snow and ice have absolutely no effect on its operation. They also state that it will prevent condensation on building walls and exhausts smoke or dust as well as foul air. It prevents down drafts, no matter what the inside or outside temperature, and creates positive upward suction. The Bicalky Roof Fan Ventilator is also said to be noiseless in operation. For further particulars, dealers should write to the Bicalky Fan Company, Buffalo, New York.

GOVERNMENT GIVES OUT FIGURES ON PRODUCTION OF ROLLED ZINC.

According to a report of the United States Geological Survey just issued, for many years nearly all the sheet zinc made in the United States was produced by two of the older and larger companies—the Matthiessen and Hegeler Zinc Company of La Salle, Illinois, and the Illinois Zinc Company, in the adjoining town of Peru, Illinois. Other companies, particularly the manufacturers of glass fruit jars having zinc tops, have rolled zinc for their own use, and some that furnish sheet zinc to lithographers have also rolled their own zinc. The great demand since the beginning of the war for sheet zinc to line packing cases made for shipment overseas, especially cases containing munitions or other material that is likely to be affected by salt air, has led still other firms into the business of rolling zinc. In addition to the two companies mentioned specifically above the following firms now make rolled zinc: Ball Brothers Glass Manufacturing Company, Muncie, Indiana; Hazel Atlas Glass Company, Wheeling, West Virginia; New Jersey Zinc Company, Palmerton, Pennsylvania; American Zinc Products Company, Greencastle, Indiana; Edes Manufacturing Company, Plymouth, Massachusetts; E. Phillip and Sons, South Hanover, Massachusetts; and The Platt Brothers and Company, Waterbury, Connecticut.

The United States Geological Survey, Department of the Interior, has for many years collected statistics showing the production of zinc, but while the output of rolled zinc was practically limited to that of the two companies in Illinois mentioned above the Survey could not publish statistics showing that output without disclosing individual business. The increase in the number of producers, however, has now made it possible to give these figures. A canvass of the industry by C. E. Siebenthal, of the Survey, gives the statistics. If the figures showing the exports, as published by the Bureau of Foreign and Domestic Commerce, are subtracted from the figures showing the production, the result will represent the domestic consumption. It should be borne in mind, however, that the sheet zinc used by the Government in shipping munitions overseas is not reported as exported.

The New Jersey Zinc Company made its first output in 1917, and the American Zinc Products Company in 1918. Additions to capacity amounting to nearly 50 per cent are being made at four of the principal mills to meet the increased demand for zinc for war uses and that which will result from the prevailing strong movement to find and establish new uses for sheet zinc and to extend the present uses. Every such extension, especially the substitution of sheet zinc for sheet copper and brass and for tin plate, will stimulate the zinc market and relieve to some extent the shortage of copper and tin. The War Industries Board has ordered the use of sheet zinc instead of galvanized iron or steel for refrigerator linings, a use that will require about 10,000 tons of rolled zinc. Sheet zinc can also be substituted for galvanized iron in roofing, spouting, guttering, garages, household utensils, and hospital ware.

Rolled zinc has always been quoted at so much per pound with discounts and extras for different gages and special sizes and shapes. In 1914, according to Metal Statistics, the base price ranged frm 7 to 8.75 cents a pound. In 1915 the price began at 8.75 cents and rose to 33 cents on June 9, fell to 15 cents August 23, and rose to 23 cents at the close of the year. In 1916 the price reached 25.5 cents on April 22 but dropped to 15 cents on July 11 and ended the year at 21 cents. In 1917 the base price of sheet zinc remained nearly stationary, declining to 20 cents on April 25 and to 19 cents on April 26. On February 15, 1918, the base price of zinc sheets was fixed by the Government at 15 cents and the price of rolled zinc plates at 14 cents.

Both the production and the value by classes of product are subject to slight correction because some producers that sell from a single base price do not keep their sales separated according to classes of product (which are arbitrary anyhow) and were to that extent obliged to make estimates; others, who themselves use the greater part of their output, had to estimate values. But the total production, value, and average price given may be considered accurate. The average price agrees closely with the average price shown by the exporters' manifests.

IS USEFUL IN REPAIRING RADIATORS.

In the accompanying illustration is shown an expanding rubber stopper made by the F. L. Curfman Manufacturing Company of Maryville, Missouri. This stopper should be in the possession of every radiator repair man. It is said to go right down in the hose connection and does not extend out in the way while working with the radiator. A perfectly tight seal is obtained by just a twist or two on the thumb nut. It is constructed with a brass bolt and malleable thumb nut. There are heavy galvanized washers on both ends and a good grade of rubber one inch long with tapering diameters. This stopper comes in eight sizes to fit all radiators. The F. L. Curfman Manufacturing Company makes all the different tools and supplies necessary for repairing automobile radiators. The Company states it is at all times willing to furnish instructions or suggestions along this line of work and mechanics should take advantage of its many years of experience. By addressing the F. L. Curfman Manufacturing Company of Maryville, Missouri, dealers may secure catalog and full particulars about automobile radiator repairing.

Expanding Rubber Stopper Made by the F. L. Curfman Manufacturing Company, Maryville, Missouri.

VARIETY OF SHEET METAL PRODUCTS.

C. G. Hussey and Company, Pittsburgh, Pennsylvania, make a large variety of sheet metal workers' materials. Among the articles they manufacture are: sheet copper, bottoms, roll copper, tinned and polished copper, nails, spikes, rivets, conductor pipe, eaves trough, elbows, shoes, miters, etc. This Com-

pany's products are made of high grade material. They are at all times ready and willing to coöperate with their customers. Many years ago, when they first started the manufacture of these products, they were aware of the fact that success must be paid for—efficient service and quality being the price. And the Company made good. More detailed information and price lists may be obtained by addressing C. G. Hussey and Company, Pittsburgh, Pennsylvania.

SAYS ZINC IS EASY TO SOLDER.

That no difficulty interferes with the soldering of zinc is the declaration made by W. H. Hendricks, general sales engineer of the New Jersey Zinc Company, who says: While it may not be generally recognized that sheet zinc, now so much used as a material for commercial work, is one of the easiest metals to solder, this fact is nevertheless true. Experienced operators claim that zinc is the most easily soldered of all sheet metals. Like anything else, however, in order to obtain good results it is necessary that the operator be familiar with his work.

Most failures in the attempt to secure joints of the desired strength and quality where sheet zinc is concerned are due to overheating the metal. This may occur from too long an application of the soldering iron or due to its being overheated. As in similar operations on tin, other details also contribute to obtaining the highest efficiency in the work, but these can be easily mastered by any workman who is familiar with the general operation.

Only a quick pass of the soldering iron over the metal is needed to produce a very stable joint. Otherwise the zinc is either melted or its internal structure becomes changed by the overheating, with a resultant weakening of the metal, a condition that frequently produces this complaint.

Quite important it is to know that sheet zinc melts at a temperature of 419 degrees Centigrade, or 786 degrees Fahrenheit. It should also be remembered that unlike in the soldering of tin, the best results are obtained by using a soldering iron that has not become so hot as to become dull red in color. Too often the mistake of heating the iron to a dull red before applying occurs and becomes a factor in preventing a good job. Less than 500 degrees Centigrade or 932 degrees Fahrenheit is necessary in getting the iron to the proper heat to solder joints when sheet zinc is utilized, by the quick application above referred to.

It is customary to use half and half solder, and with its intelligent application excellent work can be accomplished. Preceding the actual operation, however, a "cut acid" fluxing solution, or a solution of zinc chloride acidulated with muriatic acid, should be applied to the metal being prepared for the work.

As is true of other metals, care should be observed to insure the sheet zinc being first free from dirt or grease, particularly along the line to be soldered, and the customary precaution should be taken in making sure that the seam surfaces are in perfect contact. These details are essential in the successful soldering of any metal whether it happens to be zinc or tin or possibly other materials of the non-ferrous field.

Contrary to the prevalent idea among some metal workers, the successful soldering of zinc is one that need neither be feared nor shunned because of the supposition that the work is hard to accomplish. By observing the above details the operation is simple and necessitates the use of very little solder.

Modern automatic soldering machinery has been installed in various plants where a large number of zinc articles are made. These have lessened to a marked degree the difficulties that were once thought to beset those who derive their livelihood from working this metal, but the hand method gives equally satisfactory results when employed by experienced workmen.

SOLDERING FLUX IS NON-CORROSIVE.

The Allen Non-Acid Soldering Flux made by the L. B. Allen Company, Chicago, Illinois, shown in the illustration herewith, is non-corrosive. It is particularly convenient because it is put up in stick form. A perfect point is easily obtained by heating the job, giving a light rub with the stick, and then applying the solder. It makes a quick, strong joint, either with aluminum to aluminum or to copper, brass, steel or any other metal. One of its many advantages is that its ingredients are uniform in composition. It can always be relied upon to give the same results. Every stick of this soldering flux is prepared with the same care and from materials which are kept up to a fixed standard of excellence. The Company sends out free samples upon request and every dealer should give the Allen Non-Acid Soldering Flux a trial. The Company also furnishes descriptive circulars. For more complete information, address the L. B. Allen Company, 4555 North Lincoln Street, Chicago, Illinois.

The Allen Soldering Stick Made by L. B. Allen Company, Chicago, Illinois.

NOTES AND QUERIES.

Hummer Warm Air Heater.

From The Butzloff Hardware Store, Belle Plaine, Iowa.

Please give us the address of R. J. Schwab and Sons Company, manufacturers of the Hummer Warm Air Heater.

Ans.—They are located in Milwaukee, Wisconsin.

Stamping in White Enamel.

From J. E. Gillam and Sons, 874 Pueblo Street, Salt Lake City, Utah.

Kindly inform us where we can get stamping and moulding work done in white enamel.

Ans.—Modern Tool and Stamping Company, 313 South Clinton Street; and Reliance Die and Stamping Company, 501 North LaSalle Street; both of Chicago.

Metal Fire Escapes.

From M. B. Lund, Hollandale, Wisconsin.

Will you please tell me where I can buy metal fire escapes?

Ans.—The Fred J. Meyers Manufacturing Company, 1313 South Adams Street, Hamilton, Ohio; Central Iron Works, Lake and Sangamon Streets, Chicago; Hanke Iron and Wire Works, 800 North Albany Avenue, Chicago; and F. P. Smith Wire and Iron Works, Lake and Dearborn Streets, Chicago.

WEEKLY REPORT OF TRADE AND THE MARKETS

LABOR IS CONSIDERED ONE OF THE BIG ELEMENTS IN STEEL PROBLEMS.

The consensus of the steel trade is that there are just two things which can be done toward an early resumption of activity. The heads of the controlled transportation system must either enter the market with orders at prices that will restore public confidence, or prices must be let down temporarily in order to induce the consuming public to come into the market. All thought of price fixing has been abandoned. In fact the suggestion that this course be adopted is believed to have been a mistake, and even if the trade could go back to it, there is a strong probability that it would never be made. This also applies to control. The opinion now favors an absolutely untrammeled development along natural lines, and it is believed that the entry of the transportation system to the market at its present level would do more to initiate the movement toward reconstruction than anything that could be done.

The alternative, a reduction of prices, is almost out of question. The published statement made by Samuel Gompers that labor will resist any effort to reduce wages is believed to be the strongest factor against a reduction of prices. A second almost equally important factor is represented by the uncertainty with regard to taxes. If all excess profit taxes were abolished and the mills were assured that the reduction in prices would be made up by reductions in taxes, there would be a chance for reduction that would leave wages practically undisturbed. Steel labor is not on the same basis as other labor and the readjustments are not expected to involve as many difficulties as may reasonably be expected in a general readjustment of wages. Readjustment in the key-industry would entail readjustment in other trades, and the reflex of the change would be more important than its direct effect.

Sales managers see little prospects of a resumption of business along important lines as long as the situation retains the features which now dominate it. There has been a great deal of talk about the "reconstruction of Europe" and of the needs of foreigners, but foreigners are controlled by the same economic impulses that govern the business men of this country and they are holding off, and will continue to hold off for what they believe to be an inevitable revision of prices.

The fact is illustrated by the number of cancellations being received in many branches of export trade. In some cases the volume of the cancellations has excited the interest of the State Department, and investigations are said to be in progress. But the trade sees nothing strange in these cancellations. They were to be expected, and will continue as long as uncertainty is the dominating factor in trade.

Everybody who cancels a forfeit is expected to lose in the long run. There is nothing in the economic situation that warrants the expectation of lower prices. The trade expects prices to pick up the minute trade is resumed, but admits that it will be hard to start. This expectation is based on the realization of the world needs in nearly all commodities, and in the appreciation of the inflation which has resulted from the war. The world debt will never be paid if the business men allow deflation to follow consent to the payment of the debt with dollars that would be worth two or three of the current dollars. Inflation in the opinion of business leaders is here to stay if business interests are consulted, and any attempt to force deflation will meet with opposition.

The practical abandonment of the fantastic scheme to continue the production of war materials for the purpose of insuring the continuous employment of labor was welcomed with a sigh of relief. The plan never reached the serious stage and received more credence than it was fairly entitled to. The work of readjustment as between the several branches of the trade is proceeding at a satisfactory rate, and manner. Some business is being brought out that belongs in the peace category, and is expected to tide over some weak places.

Rumors of the organization of a steel "cartel" under the provisions of the Webb Act are in circulation and in view of recent developments they are considered probably well founded. The "cartel" according to the reports will be composed largely of the independents, but is expected to coöperate with the export department of the leading interests. The intent it is said is to develop direct relations with steel consumers in foreign countries, and to coöperate in all matters of common interest.

STEEL.

The two classes of buyers prominently in the market are the jobbers and the automobile makers. With the removal of restrictions as to the character of sales the jobbers can make, they are desirous of buying more broadly, of such material as they can dispose of at once. While there are some fairly large lots of steel in stock by jobbers they are poorly distributed, some markets being altogether bare of steel while others are relatively well provided, while there is also much divergence in the volume of stocks held in different lines. All buying by jobbers is for the earliest delivery that can be made, and producers' stock lists are being scrutinized closely even for odd lots.

The automobile trade evidently expects to be able to get on a 100 per cent production basis by about January 1st and desires to provide all steel fully. Price is altogether a secondary consideration with the automobile trade, which has notified the public that no reduction in the price of cars is to be expected before

the close of the spring season at the earliest. Steel prices are no consideration, the automobile makers being willing to pay government limits without question and they do not seem to be very particular about new conditions that might develop by government price fixing being discontinued, as to deliveries after December 31st.

COPPER.

According to the *Wall Street Journal,* copper authorities do not look for any great disturbance in the industry during the readjustment period. In all probability, they say, the Government will exercise control over prices, etc., until such time as the situation can take care of itself. Prior to January 1, 1919, when the 26 cents a pound price expires, some announcement is looked for, either continuing regulations now in force for perhaps another two months or fixing a minimum price for an indefinite period.

Business in copper is dull and will probably continue so through the rest of the year. But there is nothing unusual about this. Consumers are fairly well stacked up with metal or have ordered enough to carry them through November and December. In the absence of any official price covering the period after December 31 they are not inclined to enter the market at this time.

Copper producers generally are in a very strong financial position and can view with equanimity a temporary period of dullness. The pressure for metal for war purposes, of course, is over, and mines, smelters and refineries are likely to make less effort to operate at top speed while productive costs are relatively high and a lower selling price may be expected in the not distant future.

No doubt is expressed in the trade, by either consumers or producers, but that peace time requirements of the metal will be as great as during the war period, but some time must necessarily elapse before this demand can be given full expression. The ultimate consumer, including power companies, railroads and manufacturers using electrical equipment, naturally expect lower prices and until some concessions are granted they will buy conservatively.

TIN.

The condition of the tin market is such that there is no demand and prices are being constantly reduced to try to effect sales. The lots which are being offered are, of course, by over-bought consumers. Dealers have practically no stock. Most of these consumers seem satisfied to shade the price at which it was believed the first deliveries from the United States Steel Products Company would be made because they will not require the tin until the spring months when lower prices than the first ones must surely be made to the trade. If prices are much further reduced on these special lots they will afford bargains for the dealer for this small trade.

LEAD.

No change has taken place in the lead situation, nor is there any likelihood of change during the next month or two. No domestic lead in carload lots is to be had under 7.75 cents East St. Louis, the present maximum price, and no surplus is likely for some time to come. Lead made from foreign ores is still being offered at 7 cents in bond New York and western delivery. Apparently this lead cannot be exported at a profit over 7 cents at present.

SOLDER.

The prevailing prices for solder in the Chicago market are as follows: Warranted 50-50, per pound, 46 cents; Commercial 45-55, per pound, 42.8 cents; Plumbers', per pound, 39.7 cents.

SPELTER.

The week opened with good inquiry in the spelter market and prices went as high as 8.45 cents for prompt shipment East St. Louis basis. The market, however, has grown quieter in the meantime and the quotations are now 8.20 cents spot and 8.10 cents December delivery.

SHEETS.

The removal of restrictions and the increased demand for commercial purposes have resulted in improved production of all classes of sheets. In general, sheet mill operators are optimistic over the outlook and expect present mill activities to continue well into the first quarter of next year.

TIN PLATE.

All governmental restrictions as to production, utilization and shipments of tin plate have been removed and the expectation is that before long there will be a considerable modification of the priorities requirements. The War Industries Board, however, retains control of prices. It must not be assumed that removal of the restrictions on the use of plate will mean that the mills immediately will increase production. There has been no change in the steel allotment for tin plate and until some action is taken with regard to a more widespread distribution of steel supplies, the tin plate mills will be obliged to observe the War Industries Board's ruling which permits a maximum of 70 per cent of capacity operations.

OLD METALS.

Wholesale quotations in the Chicago district, which may be considered nominal, are as follows: Old steel axles, $41.52; old iron axles, $41.52; steel springs, $30.36; No. 1 wrought iron, $29.75 to $30.36; No. 1 cast iron, $29.50 to $30.36, all net tons. Prices for non-ferrous metals are as follows, per pound: Light copper, 15 cents; light brass, 10 cents; lead, 5 cents; zinc, 4½ cents; cast aluminum, 20 cents.

PIG IRON.

Furnacemen in general are disposed to maintain that pig iron prices are not marked for a decline, and it is even suggested that if government control were dropped there would be an advancing tendency. All would depend upon demand, and consumers are not yet in position to form any definite opinion as to what their requirements are going to be.

Current Hardware and Metal Prices.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

METALS.

PIG IRON.

Basic	$34 40
Northern Fdy., No. 2	34 00
Southern Fdy., No. 2	40 25
Lake Sup. Charcoal	38 70–39 00
Malleable	34 50

FIRST QUALITY BRIGHT TIN PLATES.

		Per dox
IC	14x20	$16 80
IX	14x20	18 70
IXX	14x20	20 80
IXXX	14x20	22 15
IXXXX	14x20	23 65
IC	20x28	33 60
IX	20x28	37 40
IXX	20x28	41 60
IXXX	20x28	44 30
IXXXX	20x28	47 30

COKE PLATES.

Cokes, 180 lbs	20x28	$18 50
Cokes, 200 lbs	20x28	18 80
Cokes, 214 lbs.	IC 20x28	19 40
Cokes, 270 lbs.	IX 20x28	21 75

BLUE ANNEALED SHEETS.

No. 10	per 100 lbs. $5 57
No. 12	per 100 lbs. 5 57
No. 14	per 100 lbs. 5 62
No. 16	per 100 lbs. 5 72

ONE PASS COLD ROLLED BLACK.

No. 18-20	per 100 lbs. $6 32
No. 22-24	per 100 lbs. 6 37
No. 26	per 100 lbs. 6 42
No. 27	per 100 lbs. 6 47
No. 28	per 100 lbs. 6 52

GALVANIZED.

No. 16	per 100 lbs. $7 02
No. 18-20	per 100 lbs. 7 17
No. 22-24	per 100 lbs. 7 32
No. 26	per 100 lbs. 7 47
No. 27	per 100 lbs. 7 62
No. 28	per 100 lbs. 7 77
No. 30	per 100 lbs. 8 27

POLISHED SHEET STEEL.

No. 24	per 100 lbs. $7 82
No. 26	per 100 lbs. 7 87
No. 27	per 100 lbs. 7 92
No. 28	per 100 lbs. 8 02

SMOOTH SHEET STEEL.

		Per 100 lbs.
Wood's Smooth	No. 20	$7 27
" "	No. 22-24	7 32
" "	No. 25-26	7 37
" "	No. 27	7 42
" "	No. 28	7 52

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, 100 lbs., base No. 28 ..... $11 55

BAR SOLDER.

Warranted, 50-50	per lb. 46 c
Commercial, 45-55	" 42.8c
Plumbers'	" 39.7c

SPELTER.

In slabs 9½c

SHEET ZINC.

Cask lots	18c
Less than cask lots	$18 50 to 19 00

COPPER.

Copper sheet, base 36c

LEAD.

American Pig	$8 50
Bar	9 00

Sheet.

Full coils	per 100 lbs. $11 00
Cut coils	per 100 lbs. 11 25

TIN.

Pig tin	Nominal
Bar tin	Nominal

HARDWARE.

ADZES.

Carpenters'.

Plumbs ..... Net

Coopers'.

Barton's	Net
White's	Net

Railroad.

Plumbs ..... Net

AMMUNITION.

Caps, Percussion—per 1,000.

F. L., Waterproof, 1-10s	20&2½%
G. D	20&2½%
Musket	20&2½%

Shells, Loaded.

Loaded with Black Powder	20&2½%
Loaded with Smokeless Powder, medium grades	20&2½%
Loaded with Smokeless Powder, high grade	20&2½%

Winchester.

Smokeless Repeater Grade	20&2½%
Smokeless Leader Grade	20&2½%
Black Powder	20&2½%

U. M. C.

Nitro Club	20&2½%
Arrow	20&2½%
New Club	20&2½%

Gun Wads—per 1000.

Winchester 7-8 gauge	$2 25
" 9-10 gauge	1 94
" 11-28 gauge	1 63

Powder.		Each
DuPont's Sporting,	kegs	$11 25
" "	½ kegs	5 90
" "	¼ kegs	3 10
DuPont's Canisters,	1-lb.	56
" "	½-lb.	32
" "	¼ lb.	22
" Smokeless,	drums	43 50
" "	kegs	22 00
" "	½ kegs	11 25
" "	¼-kegs	5 75
" "	canisters	1 00

L. & R. Orange, Extra Sporting kegs	11 25
L. & R. Orange, Extra Sporting ½-kegs	5 90
L. & R. Orange, Extra Sporting ¼-kegs	3 10
L. & R. Orange, Extra Sporting 1 lb. canisters	56
L. & R. Orange, Extra Sporting ½ lb. canisters	32
L. & R. Orange, Extra Sporting ¼-lb. canisters	22
Hercules "E.C." and "Infallible" 50 can drums	43 50
Hercules "E. C.," kegs	22 50
Hercules "E. C.," ¼-kegs	11 25
Hercules "Infallible," 25 can drums	22 00
Hercules "Infallible," 10 can drums	9 00
Hercules "E. C.," ¼-kegs	5 75
Hercules "E.C." and "Infallible" canisters	1 03
Hercules W. A. .30 Cal. Rifle, canisters	1 25
Hercules Lightning Rifle, canisters	1 25
Hercules Sharpshooter Rifle, canisters	1 25
Hercules Unique Rifle, canisters	1 50
Hercules Bullseye Revolver, canisters	1 00

ANVILS.

Trenton, 70 to 80 lbs.	9½c per lb.
Trenton, 81 to 150 lbs.	9¼c per lb.

ASBESTOS.

Board and Paper, up to 1/16"	17c per lb.
Thicker	18c per lb.

AUGERS

Boring Machine	60%
Irwin's	25%
Carpenter's Nut	50%

Hollow.

Bonney's	per doz.	30 00
Stearns, No. 3	"	60 00

Post Hole.

Iwan's Post Hole and Well	25%
Vaughan's, 4 to 9-in.	per doz. $13 00

Ship.

Ford's, with or without screw, Net list

AWLS.

Brad.

No. 3 Handled	per doz.	$0 65
No. 1050 Handled	"	1 40
Shouldered, assorted 1 to 4,	per gro.	4 00
Patent asst'd, 1 to 4	"	85

Harness.

Common	"	1 05
Patent	"	1 00

Peg.

Shouldered	"	1 60
Patented	"	75

Scratch.

No. IS, socket hand'ld.	per doz.	2 50
No. 344 Goodell-Pratt, List, less		35-40%
No. 7 Stanley	"	2 25

AXES.

Boys' Handled.

Niagara	"	12 50

Broad.

Plumbs, West, Pat.	List
" Can. Pat.	$69 00
" Firemen's (handled),	per doz. 21 00

Single Bitted (without handles).

	Prices
Warren Silver Steel	on application
Warren Blue Finished	"
Matchless Red Pole	$11 50

Double Bitted (without handles).

Warren's Natl. Blue, 3½ to 4½ lb. ..... Prices on application

The above prices on axes of 3 to 4 lbs. are the base prices.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$5 00	6 50	7 50	9 00

BALANCES, SPRING.

Pelouze 20%

BARS, CROW.

Pinch or Wedge Point, per cwt. $8 50

BASKETS.

Clothes.

Small Willow	per doz.	15 00
Medium Willow	"	17 00
Large Willow	"	20 00

Galvanized Steel	½ bu.	1 bu.	1½ bu.
Per doz.	$11 50	$17 00	$22 00

BEATERS.

Carpet.

	Per doz.
No. 7 Tinned Spring Wire	$1 10
No. 8 Spring Wire coppered	1 50
No. 9 Preston	1 75

Egg.

	Per doz.
No. 50 Imp. Dover	$ 1 10
No. 102 " " tinned	1 35
No. 150 " " hotel	2 10
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 50

Hand.

	8	9	10	12
Per doz.	$11 50	13 00	14 75	18 00

Moulders'.

12-inch ..... Per doz. 20 00

BELLS.

Call.

3-inch Nickeled Rotary Bell, Bronzed base ..... per doz. $5 50

Cow.

Kentucky 30%

Door. Per doz.

New Departure Automatic ... $ 7 50

Rotary.

3 -in. Old Copper Bell	6 00
3 -in. Old Copper Bell, fancy	8 00
3 -in. Nickeled Steel Bell	6 00
3½-in. Nickeled Steel Bell	6 50

Hand.

Hand Bells, polished	15%
White Metal	15%
Nickel Plated	10%
Swiss	15%
Silver Chime	10%

Miscellaneous.

Church and School, steel alloys				30%
Farm, lbs.	40	50	75	100
Each	$3 00	3 75	5 50	7 25

BEVELS, TEE.

Stanley's rosewood handle, new list ..... Nets

Stanley's iron handle ..... Nets

BINDING CLOTH.

Zinced	55%
Brass	40%
Brass, plated	60%

BITS.

Auger.

Jennings Pattern	20%
Ford Car	List plus 5%
Ford's Ship	" " "
Irwin	35%
Russell Jennings	15%
Clark's Expansive	33⅓%
Steer's " Small list, $22 00	5%
" " Large " $26 00	5%
Irwin Car	35%
Ford's Ship Auger pattern Car	List plus 5%

Center 10%

Countersink.

No. 18 Wheeler's	per doz.	$2 25
No. 20 "	"	3 00
American Snailhead	"	1 75
" Rose "	"	2 00
" Flat	"	1 40
Mahew's Flat	"	1 60
" Snail	"	1 90

Dowel.

Russell Jennings 15%

Gimlet.

Standard Double Cut. Doz. $1 10—$1 60

Countersink ..... Doz. 1 80

Reamer.

Standard Square	Doz.	2 50
American Octagon	"	2 50

Screw Driver.

No. 1 Common	"	1 40
No. 26 Stanley		1 75